APPLIED ECONOMICS

THE APPLICATION OF ECONOMIC PRINCIPLES
TO THE PROBLEMS OF ECONOMIC CONTROL

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Preface to the Fourth Edition

WHEN the first edition of this book was written, more than twenty years ago, critics of economic theory had been complaining that it was too abstract to be of any value in practical matters of policy. To support their opinion, they pointed to the fact that in economics textbooks there appeared to be very little connection between those parts devoted to exposition of the theories and those dealing with the problems. We felt that the theories did have important applications to these problems; therefore we set about producing a work in which the connection between the two things would be shown. That remains our purpose in the present edition. It is all right for some economists to specialize on theory and others on the various applied fields, but the work of the latter should build upon that of the former. They should not be separated in watertight compartments. It behooves those of us who are teachers to impress this point of view upon our students. It follows that an economic problems text should be one that builds upon a foundation of previous training in the principles, applying the latter concretely to the problems of economic welfare. That is what we have tried to do in this book; hence the title, *Applied Economics.*

In the past twenty years there have been a number of important developments in economic theory, and some significant changes in both economic and political institutions. Especially has there been a marked growth of governmental intervention in industry in this country, and a transition from capitalism to collectivism in some parts of the world. The Second World War and its aftermath have accelerated these changes. As a result, the institutional setting is different, and this to some extent alters the nature of the problems that confront our world. Because of these things, we have found it necessary to make a very thorough revision of this book—so thorough that many portions of it have been entirely rewritten, and the whole volume has had to be reset in new type.

In particular, the grouping of topics has been changed, so that there are now nine parts instead of six; and all the chapters relating to a single subject (such as monopoly or labor) are brought together in one place, whereas different phases of them were formerly dealt with separately in different parts of the book. In this edition there are a number of new chapters, notably these dealing with the problems of unemployment, of corporation finance and the securities markets, and of fiscal policy. Nearly all the other chapters have been extensively revised. Three of the former chapters have been eliminated, viz., the chapter dealing with achievement and failure in

our economy and the two chapters devoted to general aspects of governmental intervention in economic life. The essential parts of these chapters have been incorporated elsewhere. In addition to these changes, many new works have been listed in the references and suggestions for further reading.

It is always a temptation, in making successive revisions of such a work as this, merely to add new material without reworking the old, so that the book becomes patchy and voluminous. We have endeavored to avoid patchiness by preserving the unity of each chapter, and of the work as a whole; and by rearranging the topics, condensing some parts and omitting passages that we felt could be spared, we have kept the total length within bounds that we trust will not be thought unreasonable. We hope that the changes will bring the discussions abreast of current developments, and that the rearrangement will make the book more useful in the classroom.

The help and counsel of so many friends and associates have aided us in the preparation of the several editions that it would be difficult to make specific acknowledgments to them all, but we take this opportunity to record our appreciation. We are grateful, too, to the numerous teachers who, from time to time, have sent us comments and suggestions drawn from their experience in using the text in their classes. We have profited by their constructive criticisms. Finally, our thanks are due to Miss Ingrid Hahne for her assistance in helping with some of the work of this revision.

We have taken advantage of successive reprintings of this edition to correct typographical errors, add new titles to the References and Suggestions for Further Reading, and make minor improvements in our discussion of certain topics.

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PART I

THE BROAD PROBLEM OF ECONOMIC CONTROL

CHAPTER 1

The Task of Applied Economics

A. Economic Science and its Application

The Purpose and Method of Scientific Study.—Economics is commonly regarded as a science. As such, its purpose is to make the world a better place in which to live. This statement may be doubted by some, for it is often said that science is the outcome of human curiosity rather than of any seeking after welfare, and that scientists are engaged primarily in the pursuit of knowledge for its own sake, rather than for any practical application which can be made from their discoveries. But this is only a part of the truth. No doubt some scientists are actuated by no other motive than curiosity about the world they live in, and they may have no more tangible goal in sight than the pursuit of truth; yet the final result of scientific activity, and the ultimate justification for its existence, is to be found in its contributions to the progress of civilization. When Faraday experimented with the effects of a galvanic current upon the leg of a frog, he may never have dreamed of the tremendous possibilities that would some day result from man's knowledge of electricity. But we now know that the painstaking researches of pioneers in physics have been abundantly justified in the wonders of electrical power and communication which we enjoy today. Economics, likewise, has its contribution to make toward the practical improvement of the world in which we live. Our present quest will be an attempt to find out what are these possibilities.

But the application of science to the solution of practical problems must be distinguished from science itself. The essence of science lies in its method of study. That method is one of painstaking, impartial gathering of facts, and careful formulation of the laws and principles which the study of those facts reveals. Someone has said that science is simply the accurate description of phenomena. The statement is apt, for it is the province of pure science to describe things—and to describe them just as they are, exactly and truthfully, without bias or prejudice. It is important to emphasize this last phrase, for the introduction of bias into scientific work is sure to interfere with the discovery of truth. We must accept what the facts reveal, whether we like it or not. We may find it disagreeable to learn that eating too much starch increases stoutness, but if the facts of physiology show this to be the case, stout people must not allow their preference for starchy foods to blind them to it. In Columbus' time it was a popular belief that the world was flat, and

the stubborn prejudice of people against the view that it was round long prevented the establishment of what we now recognize as scientific truth. Pure science is no respecter of persons or prejudices. It is not concerned with things as we would like them to be, but only with things as they are.

It does not follow, however, that in selecting a subject for scientific inquiry, we should not be influenced by human desires and problems. Pure science wholly abstracted from such desires and problems is almost unthinkable. Accordingly, scientists confine their studies mostly to fields that have some practical importance, knowledge of which will be helpful in the solution of some concrete problem.

Given the findings of pure science, then, we may apply them to the solution of problems in which we are interested. Here we are forced to depart from science to some extent, for the very existence of a problem implies the making of moral judgments which lie outside the realm of science A problem to be solved implies an end to be attained, but science does not tell us what ends are ultimately good and desirable. The problem may be that of prolonging human life. It implies that longer life is desirable; but we accept this on intuitive or ethical grounds; we cannot prove it by scientific demonstration. Or, the problem may be that of building a beautiful house; but our esthetic feelings, not science, must guide us in deciding what type of architecture is the most artistic. When we have decided the end to be sought, however, we can proceed to attain it in a strictly scientific way; for our knowledge of scientific laws will tell us that certain causes will lead to certain effects, and we have but to apply this knowledge to accomplish the desired result. So, if we agree upon the desirability of a longer span of human life, the laws of health developed by medical science will show us how to bring it about; and if we decide upon an Elizabethan type of home as the one that is most beautiful, scientific knowledge of building materials, stresses and strains, insulation, and the like, will enable us to build one that will be both economical and substantial. Such application of scientific principles to the attainment of ends deemed desirable is known as applied science.

Our analysis indicates that three steps are required in the development of applied science. They are (1) careful observation of the facts in the field selected for inquiry, and the working out of descriptive laws or formulas concerning them—pure science; (2) formulation of judgments as to the desirability or undesirability of certain conditions, events, or institutions within the field—a matter of ethics; (3) application of the findings of the science to the attainment of the desirable or the elimination of the undesirable things—applied science.

Pure Economics, Economic Ethics, and Applied Economics.—In the present volume we have chosen economic phenomena as the field to be studied. Economics is the subject which treats of this field, and it has three phases, which correspond to the three steps of the above analysis. These

three phases we may call pure economics, economic ethics, and applied economics, respectively. Pure economics is the science that describes the industrial activities of men, just as they are found today in the world about us. It tells, for instance, of the existence of specialization and exchange in the productive organization, of the role of money, of how prices are established, and of how the income of society is divided among the factors of production which help to create it. But it has nothing to do with the goodness or badness of these things, nor is it concerned with their improvement. Some critics of economic science have objected to this detached and almost cold-blooded analysis. They are so impressed with the defects of our economic organization, and so zealous to reform it, that they are impatient with the painstaking, impartial survey of the careful scientist. They feel it is a waste of time to analyze so laboriously features of the existing structure which, in their judgment, are so obviously undesirable that they should be done away with. But these well-intentioned people are mistaken. How can we be sure what changes are needed in this or that institution until we have examined it minutely and learned to understand it? And if we find it unsatisfactory, how are we to propose a trustworthy solution unless we are first equipped with a thorough understanding of the laws which operate in economic affairs? Pure economics is the necessary foundation to any program of economic reform, and without this foundation no real and lasting progress is likely to be made.

Given the findings of pure economics, we are ready to pass judgment upon economic institutions, to determine how far they contribute to our well-being, and how far they are in need of correction. In making such a criticism we are compelled to introduce some ethical standards or norms of welfare. This is primarily a matter of economic ethics, and though it makes use of the findings of science, it is not in itself a strictly scientific analysis. Pure economics deals exclusively with what is, but economic ethics is concerned with what ought to be. It involves the testing of existing institutions in the light of certain ethical standards set up as a criterion, and the formulation of goals of progress to be achieved in our economic evolution. Whether production is efficient or inefficient, whether the management of industry should be in the hands of private enterprisers or of the state, whether prices should be rising, falling, or stationary, how income ought to be divided—these and a great many other questions fall within its purview. In seeking an answer to them our judgments may be based on scientific knowledge of the consequences which follow from this or that arrangement, but in the last analysis our final criteria of justice—our standards of right and wrong—must be based on ethical considerations.

Given such judgments of the goodness or badness of existing institutions, and having formulated the goal of economic progress, we are in a position to lay down a program of reconstruction. This is the task of applied

economics. Such a program can be set up in a strictly scientific way. Applied economics, therefore, may properly be characterized as a science; but we must not lose sight of the fact that it is founded upon economic ethics.

An illustration of how applied economics goes about its task will make the nature of the subject, and its relation to economic ethics, more clear. Suppose we were to decide, in view of certain ethical standards, that greater equality of incomes in society would be desirable It would be the task of applied economics to set forth a method by which such greater equality might actually be attained, if possible. We might find that, by the application of economic laws to the problem, a solution could be worked out. In this case, the decision as to whether greater equality was desirable would be a matter of ethics and not of science; but the working out of measures for the attainment of such equality would be a strictly scientific proceeding, if carefully done Here is another example: The analysis of pure economics reveals that when the level of prices rises, debtors are enriched at the expense of creditors. Ethical considerations may lead us to conclude that this is unjust, and that therefore the price level should be stabilized. Applied economics tells us how such stabilization can be achieved.

So we see that applied economics rests upon pure economics and economic ethics as its foundations. Both of these are essential. In this book a knowledge of economic principles will be assumed, and we shall have occasion to make use of these principles again and again as we proceed.

The Role of Judgment in Applied Economics.—In the ensuing chapters, we shall examine existing economic institutions critically, using our knowledge of economic principles to see how they work, and employing ethical considerations to appraise the results. We shall find some virtues that need to be preserved and some defects that need to be corrected. Then, building again on economic principles, we may be able to suggest measures of reform that will help correct the defects and promote greater welfare.

It must not be supposed that these suggestions for reform will always be the final word of science upon the matter at hand. The problems of economic life are so complex that it is not always possible to say exactly how they should be solved. Even though we can discover what factors are to be reckoned with, we cannot always measure them exactly enough to say what is their relative importance The pure science of economics is far from perfected, and the applied science is only in its infancy So we are often forced to rely upon judgment as to what is the best course of action in a given situation. A knowledge of economics is a valuable aid to the making of such judgments, and measures of improvement based upon such knowledge are much more likely to succeed than those proposed by persons lacking in such a background; but they are not infallible. In many cases more than one possible way of correcting a difficulty seems open. Here differences of opinion as to the wisest course of action may arise, even among experts. On the

other hand, there are many times when there is substantial agreement among economists, not only as to the defects of our present industrial system, but as to the most hopeful means of correcting them. Where this is true, the analysis and proposals of this volume will merely record the collective judgment of economists generally. In other cases the proposals for reform must be taken as an expression of opinion by the present writers. Always, however, an attempt has been made to examine the proposals in the light of the facts and economic principles involved, and to base the proposed remedies upon scientific reasoning.

The Social Point of View.—In the analysis of economic problems, we must not forget that economics is a *social* science; that is, it deals with human beings in relation to each other, and not with individuals as separate entities. Hence, our concept of progress is a broad concept. We are concerned with the welfare of society as a whole, not with that of any one person or group of persons. It is important to stress this because most persons, in passing judgments upon economic phenomena, are inclined to be influenced by their own particular interests, forgetting that the interests of others may be just as important as their own. There are times when the well-being of one member of society is in conflict with that of his fellow citizens. In such a case, if he is in the minority, their interests should take precedence over his. It is not always easy so to detach oneself from one's personal interests and to view the community in the large. A manufacturer of woolen goods, for instance, would find it difficult to pass an unprejudiced judgment upon the value of tariff protection to this country, because he makes his living in an industry whose very existence is dependent upon the maintenance of protective duties on woolen goods. Yet if it is true, as many economists believe, that such tariffs benefit a special class of favored individuals at the expense of a great multitude of consumers, fair minded judgment would compel us to decide that such tariffs should be abandoned for the sake of the general welfare. Likewise, a laboring man might find it very hard to arrive at a correct judgment concerning the desirability or undesirability of such union practices as those tending to limit the output of labor. Yet from the standpoint of social welfare we might find it necessary to condemn such practices. The attitude we should assume has been aptly expressed in the phrase "the greatest good to the greatest number" Let us, then, forget any prejudices which we may have acquired from our own selfish interests in life, or from the environment into which we have been thrown, and be prepared to consider the problems confronting us in the cold light of reason, allowing ourselves to accept whatever conclusions we are led to by the logic of careful analysis, remembering always that our judgments must be based on the welfare of the community

General Welfare and Economic Welfare.—But what is the welfare of the community? Generations of philosophers have sought the answer to this

question. The discovery of an ultimate standard of what is good or desirable is one of the chief problems of ethics. Some thinkers believe that it is possible for science to give the answer, but it is a question which appears to be beyond the realm of scientific investigation. Ethicists themselves do not agree concerning it. The best that we can do is to express in a general way that which we feel we are striving for. An exact definition of welfare, therefore, is almost impossible to secure. Perhaps the ultimate goal of human activity is the attainment of maximum happiness. Perhaps it is to secure the fullest expression of our latent capacities. Maybe these are but two different aspects of the same thing. Whatever it may be, the welfare of the people depends upon a great number of influences. It involves such matters as codes of morality, education, religious ideals and observances, the cultivation of beauty, the development of material science, and the whole of our existing culture.

Fortunately, we do not have to deal with so vast a problem, for our concern is only with *economic* welfare. By that we mean such part of general welfare as is dependent upon, and influenced by, economic activity and economic institutions.

Although economic welfare is only one phase of general welfare, it is an important phase, for general welfare depends very largely upon economic conditions. For instance, in the making of cotton textiles children may be employed. This employment may have important effects for good or evil upon their whole future lives. Their welfare is closely bound up with their economic situation. Again, one's happiness depends, at least to some extent, upon his ability to earn a living. It is rather difficult to have genuine welfare in a state of poverty. In fact, most of the things that go to make up the higher and nobler aspects of existence, such as art, music, social intercourse, travel, and the like, rest upon an economic foundation. Therefore, while admitting that economic welfare is neither the sole nor even the chief goal of living, it is so important a part of the general welfare that it merits a great deal of thoughtful attention.

On the other hand, we cannot consider questions of economic welfare entirely apart from their effects upon other aspects of welfare, for often one reacts upon the other in such a way as to preclude their separation. For example, we shall learn presently that economic welfare is promoted by increasing the production of goods, but that the beneficent effects of this increase might be counterbalanced by injurious effects upon health or morals, if the goods are not of a meritorious sort. Again, the increase in production would not be desirable if it was accomplished by methods which interfered with the lives, or health, or happiness of the workers. So, although we are here mainly concerned with economics, we shall find it necessary to link our discussion of economic matters with broader considerations of general welfare from time to time.

Economic Welfare, or Social Economy.—Although the notion of general welfare is rather vague, the concept of economic welfare is less so. We can work out a definition of this concept if we will consider analytically what we want economic activity to do for us. Such activity grows out of the fact that our wants are many, whereas the means of providing them are relatively few. There is a conflict between the boundless desires of men and the scarce means of production afforded by human energy and natural resources. The busy world of economic life is engaged in trying to resolve this conflict by making the scarce means go as far as possible toward satisfying our wants. To put it differently, we try to economize in our use of effort and resources so that we can get as much satisfaction from them as possible.

That explains the use of the term economics. It is the study of the means whereby a nation or a social group operates to utilize its resources economically. In fact, economics has sometimes been called social economy, and this term is an excellent one for our present purpose because it focuses our attention on the goal toward which economic activity is directed, namely, economizing. To escape as far as possible from the limitations of scarcity by making our energy and resources contribute their utmost to want satisfaction—that is what applied economics can contribute to the general welfare. Economic welfare, then, is the same thing as social economy, and if we would define the former, we must inquire what we mean by the latter.

Since it is the object of economic activity to overcome scarcity, the first criterion of social economy is an abundance of goods. An aggregate income sufficient to provide all the people with the means for a comfortable standard of living is the *first essential of economic welfare.* The abolition of want and the promotion of plenty—surely this is one of our economic goals.

Mere quantity of output is not enough; we should have quality as well. The goods which flow from the nation's industries should be of a desirable kind, for if our economic effort is devoted to the attainment of things that contribute little to our genuine well-being, it is wasted. Just as an individual may squander riches in extravagance and dissipation, deriving from them little of real utility or lasting worth, so a people may misspend its energies, diverting its productive power into the making of useless or even injurious things, such as opium for smoking or noxious patent medicines. Science gives us no test by which we can classify the products of industry into the desirable and the undesirable; we can only use our judgment, based on prevailing standards of morality and our own ideals.

Not only must we produce the right things and produce them in abundance; we should also consider what it costs us to get them, for it would be poor economy to produce goods whose utility was not worth their cost. Real costs are both material and human. On the material side there are scarce resources used up—fertility taken out of the soil, coal removed from the earth, forests cut down. We must use these resources economically so

that we get as much from them as possible, and we must hold an adequate supply of them in reserve for the future. These are matters mainly of productive efficiency and conservation. On the human side there are the costs of effort expended, monotonous or dangerous work, excessively arduous or prolonged toil, industrial accidents, occupational diseases, and even death. We should reduce these costs to a minimum, and we must make sure, in using the energy and working lives of our people, that we do not sacrifice them needlessly or wastefully. Safe, pleasant, and healthful work are just as important for welfare as a plentiful output of desirable goods.

Closely related to the criterion of minimum costs is that of full employment. It is wasteful and costly to keep resources in idleness when they might be contributing to the flow of products. Worse than that, a heavy human cost is incurred when workers are unemployed, for this deprives them and their families of their means of livelihood and plunges them into poverty and distress. Often society is compelled to support them by some kind of charitable relief, which is a burden on the community. So, from both a humanitarian and a practical standpoint, economic welfare demands that we keep our people and our productive resources fully employed.

Finally, we should see to it that the products of industry are widely diffused among the people. A great output of goods is of little value to society as a whole unless an ample share of it is enjoyed by all. No matter how great a nation's income may be, if it is so unequally divided that a few of the people are immensely rich while the masses are poor, the nation is not in a condition of *general* welfare. A part of it has welfare, but the rest have not.

Economic welfare or social economy, then, consists in: (1) an abundant income, (2) composed of the most beneficial goods, (3) produced at a minimum of material and human costs, (4) with full employment of labor and capital, (5) and widely diffused among the people. Let us now review very sketchily the evolution of our economic system, to see what progress we have made toward meeting these conditions.

B. The Rise of Capitalism

The Economic Life of Two Centuries Ago.—If we compare the economic life of today with that of two centuries ago, we find a striking contrast. America, in the early part of the eighteenth century, was in a pioneer state. Its industry consisted mainly of farming, trapping, and the like, carried on by the early settlers and their descendants, who had established homesteads created out of the wilderness by their own hands. They built their own houses, raised their own food, and made their own clothes. Such manufactured goods as were necessary to their simple method of life were imported from England in return for exports of food and raw materials. Each family

was an economic unit in itself, which, by the cultivation of its fields and by such household industries as spinning and weaving, provided nearly everything which its members needed for their existence. Obviously, its life was simple, and its wealth was, for the most part, small.

A better illustration of the changes which have taken place, however, can be obtained by picturing to ourselves the economic life of England at this period, for we inherited our economic institutions from that country, and it was there that the significant changes took place which led to the system of industry that now prevails. At the beginning of the eighteenth century, England had not progressed very far from the state of feudalism which had prevailed in the Middle Ages. The masses of the people were agricultural laborers, still carrying on a primitive type of farming on large estates (survivals of the medieval manors) under the dominance of wealthy proprietors, or lords, who constituted part of the British aristocracy. It was primarily a rural nation, about nine-tenths of its people being engaged in agricultural pursuits. The system of agriculture was crude and definitely controlled by custom, which prevented the introduction of individual innovations. Each community was rather isolated, and had very few contacts with the outside world. For the most part, it was economically self-sufficient; that is, its inhabitants produced nearly everything which their simple manner of living required.

Prior to this period some cities and towns had developed, partly as centers of defense and partly as bases for carrying on the limited amount of trading that did take place. Within these towns industry and commerce were gradually expanding. Two forms of simple manufacture existed. There were handicraft industries, such as those of shoemakers, tailors, tinsmiths, goldsmiths, and carpenters, carried on by skilled artisans, consisting of master workmen and their apprentices, who worked with hand tools, without the use of complicated machinery; and there were some domestic industries, in which employers gave out materials, such as wool, to be woven into cloth by the workers on looms owned and operated by the latter in their own homes.

Since railroads and steamships were nonexistent, the highways were little better than quagmires, and banditry or piracy was rife on land or sea, travel and the shipment of goods were hazardous. Hence, although some trade was carried on in country fairs, town markets, and by itinerant peddlers, its amount was relatively small. Without extensive trade there was not as much need for money as now, and its use was much less than we are accustomed to. Altogether, the life of this period was narrow, and circumscribed by custom, ignorance, and fixed institutions. The masses of the people, both in towns and in the country, lived in poverty; their houses were little better than huts, their food and clothing of the crudest character, their working hours long, and their recreations few and primitive.

The Industrial Revolution.—All this was greatly changed by a series of remarkable inventions and discoveries. Beginning in 1764 in England, a number of contrivances were developed which soon supplanted the hand methods of weaving then in use in the British woolen industry. Whitney's cotton gin in 1792 performed a similar service for the cotton industry of the United States. These inventions alone would not have sufficed to work a radical transformation in industrial processes and institutions, for the full development of factory methods requires the extensive production of iron and steel for machinery, and some means of power to drive it. These were soon provided by a number of improvements in methods of iron and steel manufacturing, by the invention of the steam engine, the locomotive, and the steamship, and by the development of good roads and inland waterways.

It is no exaggeration to describe these changes as a revolution, for they came with startling rapidity, and their result was a violent upsetting of existing economic arrangements. Within less than a century, the old order of industry had been swept away. Factories and great cities sprang up like mushrooms, and the countries of western Europe and America passed from rural agricultural regions to great urban manufacturing nations. Therefore, these changes are commonly referred to as the Industrial Revolution. This is usually thought of as having taken place within a period of about one hundred years, extending from the middle of the eighteenth to the middle of the nineteenth century. Within that period the capitalistic system, as we know it, became established.

In a broader sense, however, the Industrial Revolution is still going on. We are still experiencing a rapid succession of new inventions and processes which are changing the system of industry almost as rapidly as the series of inventions which began in 1764. One need but to mention such marvels as the electric light, the telephone, the telegraph, the radio, television, the hydroelectric power station, the passenger automobile and automobile truck, the airplane, and a host of other inventions, to show the truth of this statement. Chemistry, likewise, is continually yielding new discoveries which transform old industries or give rise to new ones. New processes of treating ores and other discoveries are giving us new products, such as rayon, plastics, and various metal alloys. Methods change as rapidly as machines and products. An entirely new technique of management has been developed which is greatly increasing the progress of industry. What we are experiencing is a continuous evolution of economic life. We live in a dynamic world.

The Transformation of Economic Institutions.—The transformation which has taken place in our economic life is not due alone to the progress of science and invention. Along with this progress there have been changes in economic institutions which are partly the result of the mechanization of

industry, and partly a result of other factors in the general growth of civilization. Let us consider some of these.

We have seen that the early English community and the colonial American farm were economically self-sufficient units. They did not have to depend much upon economic agencies outside of themselves to provide them with the goods they needed for their maintenance. Today we live in a world of specialization and exchange. One man makes shoes or a part of a shoe, another mines coal or helps to mine it, yet another grows wheat, and so on. Each specialist gets most of the things he uses from others through trade. The shoemaker sells his shoes for money, and with that money buys the coal, wheat, and other goods, produced by other specialists. This means that money and money substitutes (such as bank credit) have become almost universal. Nearly every producer sells his goods for money. Our income comes to us in the form of money. Almost everything we use we buy with money. Money institutions and banks occupy a dominant place in our economy.

Growing out of the prevalence of exchange and the use of money there has developed a system of prices. Almost every industrial operation culminates in a sale at a price. Prices are all-important to every producer and consumer, for on the price one gets for his product or his services, as well as on the prices which he must pay for what he buys, depends his prosperity. Indeed, prices are so all-pervasive in the modern system that we can accurately describe ours as a price economy.

In early England the position of each individual in industry was more or less governed by custom. People were divided into classes determined by birth, and they were separated by barriers which they could not cross. Even in early America we had slavery. The Industrial Revolution and the American Civil War swept most of this away. We now have a system of relatively free enterprise, in which people are at liberty to find their own places in industry, so far as their abilities and the opportunities offered by their environment permit. Anyone can establish a business of his own selection, if he has sufficient initiative and ability to do so. Or, he can enter the employment of someone else, choosing his own occupation and helping to fix the terms of his employment. He is free to buy and sell where he pleases, under terms voluntarily agreed upon, so long as he does not transgress the laws set up to prevent dishonest and unfair dealings. We will find, however, that freedom of enterprise, for both businessmen and workers, is being increasingly restricted by the growth of monopolies and unions, which block the entry of outsiders into the industries and occupations that they dominate; and it is being restricted also by more and more regulatory laws intended to curb the abuses of antisocial behavior.

Along with free enterprise goes competition. When people have freedom to enter such occupations as they please and to better their status by driving

a good bargain, there is opportunity to profit by improvements in methods, and there is plenty of occasion for rivalry among the participants in industry. Since each is governed largely by his own self-interest, and it is to his interest to increase his gain as much as possible, he is brought into conflict with his fellows. We rely tacitly on competition to secure economy in the production of goods and fair prices in their sale, yet here, again, the scope of competition is being progressively narrowed by the growth of monopolies and the increase of governmental regulation.

In the simpler economy of two centuries ago there was little private property of importance other than land, manor houses, simple cottages, and a few tools. The Industrial Revolution created important new forms of tangible wealth, such as factory buildings, railways, machinery, and industrial equipment, as well as new and durable forms of consumers' goods, such as more elaborate houses, furnishings, and automobiles. A more striking change in property institutions, however, has been the growth of intangible property rights, such as stocks and bonds. These have become widespread in modern society and have greatly changed the character of the institution of property. They have facilitated the financing of the large industrial plants necessary to carry on modern industry by permitting hundreds of thousands of people to pool their savings into one investment; but this, too, has brought its problems, as we shall see.

Finally, the modern system of industry has brought with it the much more universal payment of money wages. The worker no longer receives the actual products which he makes, or even a part of them. Instead, he is recompensed for his labor by the payment of a money wage. Thus the Industrial Revolution has divided the participants of industry into two groups an owning, employing class, who possess or control the capital necessary for production, and who direct the enterprises of which they are the heads, and a working, wage-earning class, consisting of laborers who perform the detailed operations of industry under the supervision of their employers. This gives to the employers an opportunity for profits which has undoubtedly stimulated the development of industry, but which, again, brings problems which we must consider as we go on.

Capitalism.—From this account it appears that our present economic system is characterized by these basic institutions: specialization and exchange, money and credit, prices, free enterprise and competition (which, however, are being increasingly restricted), private ownership of property (much of which is represented by intangible rights, such as stocks and bonds), and money wages. This system is known as capitalism, a term that is used to distinguish it from the system of feudalism which preceded it, and from various systems of collectivism (now emerging in some parts of the world) that would greatly modify most of these institutions.[1]

[1] See Chapters XXVIII and XXIX

Our task in this volume is to examine carefully the institutions of capitalism, to see how well they work, and how badly. In so doing, we shall consider what improvements might be made to make them work better. Then, finally, we shall study the proposals offered by the advocates of alternative systems, to inquire whether they would be likely to promote a greater measure of economic welfare. In this chapter, we are merely trying to get a bird's-eye view of these problems by surveying, in the broadest possible way, the achievements and failures of our economy.

C. The Productive Achievement of Capitalism

The Measurement of Production, or Income.—The most conspicuous achievements of capitalism have been in the field of production. As a result of the new methods of industry that were introduced during the Industrial Revolution, an ever increasing stream of products began to flow from industry, swelling the income of the people. The use of the term income in this connection may need some explanation. Most people think of income as consisting of their receipts of money, such as wages derived from employment or interest from investments, but the economist distinguishes between these receipts, which he calls money income, and real income, which consists of the commodities and services that the money will buy. These are, of course, the goods that industry produces. Social real income, therefore, is the same as industrial product. Capitalism, by its great productivity, has given us a rich and generally growing real income.

It is possible, in part, to measure this growth of income. There are two ways of going about it. One is to measure industrial output in physical terms; the other is to measure the output in terms of its money value.

The measurement in physical terms is accomplished somewhat as follows: We compile annual statistics of a sufficient variety of products to constitute a representative sample of industry. These products would include automobiles and other typical manufactured goods; crops harvested; minerals mined; railroad traffic hauled; and some personal services, such as those performed by physicians, barbers, hairdressers, and the like. We then compare the figures in each year, item by item, with a certain year that has been selected as a basis for comparison. The figures will then show the percentage of increase or decrease that has taken place in the physical volume of each product. For instance, if we take the year 1913 as the base, we might find that the number of bushels of wheat harvested in this country in 1915 was ten per cent greater than in that year. We could then express the production of that commodity in 1915 as 110 in relation to that of the base year. If we do this for our representative list of commodities and services, and then take an average of them all, it will give us a figure (known as an index number) showing the physical volume of production in 1915 as compared with that of

1913. No such index is available over a period of time long enough to enable us to measure the growth of production from the time of the Industrial Revolution to the present day, but the following table, covering the years 1890 to 1919, will serve to show what such an index is like. It reveals that the volume of physical production in this country was almost trebled in the thirty years covered by the statistics.

TABLE I

STEWART'S INDEX OF THE PHYSICAL VOLUME OF PRODUCTION [2]

(Derived from 91 commodities—Average for 1911–1913 = 100)

Year	*Index*	*Year*	*Index*	*Year*	*Index*
1890	45	1900	66	1910	96
1891	54	1901	67	1911	93
1892	50	1902	77	1912	106
1893	49	1903	75	1913	101
1894	48	1904	80	1914	101
1895	57	1905	86	1915	112
1896	57	1906	91	1916	117
1897	62	1907	89	1917	124
1898	66	1908	84	1918	125
1899	65	1909	94	1919	120

The other method of showing changes in income (by measuring it in terms of money) is to add together the money values of crops harvested, minerals extracted from the ground, products manufactured, services performed, and all other goods produced in each successive year. A comparison of the annual totals then makes it possible to calculate the amount of change that has taken place over the period of time selected for study. However, we must take account of the fact that changes in money values will be deceptive unless the figures are corrected to compensate for changes in the general level of prices For instance, suppose that real income were to remain unchanged in two successive years while the price level rose ten per cent. The aggregate money value of production in the second year would then be ten per cent greater than in the first, in spite of the fact that there had been no change in physical output To show the real change, we must correct the figures by an amount sufficient to offset the change in the price level—in this case ten per cent. The corrected total will then measure accurately the change in quantity of real income.

The Growth of Income in The United States.—In Table II there is given an estimate of our income based on this second method. It shows changes in the income of the United States, both total and per capita, from 1799 to 1946 inclusive—a period of approximately a century and a half.

[2] *American Economic Review*, Vol XI, March, 1921, pp 57 70

TABLE II[3]

NATIONAL INCOME IN THE UNITED STATES

Years	Total Income		Per Capita Income	
	In Current Dollars (billions)	In 1926 Dollars (billions)	In Current Dollars	In 1926 Dollars
1799	.7	1.1	131	216
1809	.9	1.4	130	204
1819	.9	1.6	93	173
1829	1.0	2.1	78	164
1839	1.6	3.3	98	198
1849	2.4	5.3	107	235
1859	4.3	9.1	140	290
1869	6.8	9.0	180	237
1879	7.2	15.2	147	309
1889	10.7	23.7	173	383
1899	15.3	36.1	205	482
1909	26.5	52.6	292	580
1919	63.0	65.1	599	620
1929	79.5	82.8	654	681
1930	72.4	78.0	588	634
1931	60.2	72.0	485	580
1932	46.7	62.5	374	500
1933	44.7	62.3	356	495
1934	51.6	67.8	407	535
1935	56.6	71.0	444	557
1936	65.3	80.3	510	625
1937	69.0	81.8	536	633
1938	62.8	75.8	483	589
1939	70.8	87.4	541	667
1940	77.6	94.9	588	732
1941	96.9	113.8	727	854
1942	122.2	130.6	907	969
1943	149.4	150.0	1094	1105
1944	160.7	160.4	1167	1165
1945	161.0	156.5	1150	1117
1946	165.1	149.6	1171	1062

[3] The figures from 1799 to 1938 are taken (with permission of the National Industrial Conference Board) from Robert F. Martin's *National Income in The United States 1799-1938* (1939), pp. 6-7. Those subsequent to 1938 are based on the United States Department of Commerce figures of National Income, as published in the *Statistical Abstract of the United States.*

The figures "in current dollars" represent aggregate values in terms of the prices actually prevailing in the given years; those "in 1926 dollars" have been corrected by an index of the cost of living, so that they measure income for all years as it would have been had the level of living costs remained the same throughout as it was in 1926. The table does not show quite all of the income produced in this country, but only the income actually "realized" by the people,—that is, income paid out by industrial establishments to the various claimants of the product, such as wage-earners, enterprisers, stockholders, and bondholders. Corporate surpluses and other accruals retained by business concerns, instead of being distributed, have been excluded.

The most significant figures are those of per capita income, because the growth of total income was partly offset by population increase. Only to the extent that total income grows faster than population is there any improvement in the standard of living of the people. The clearest way to visualize the per capita figures is by means of the accompanying chart (Figure 1).

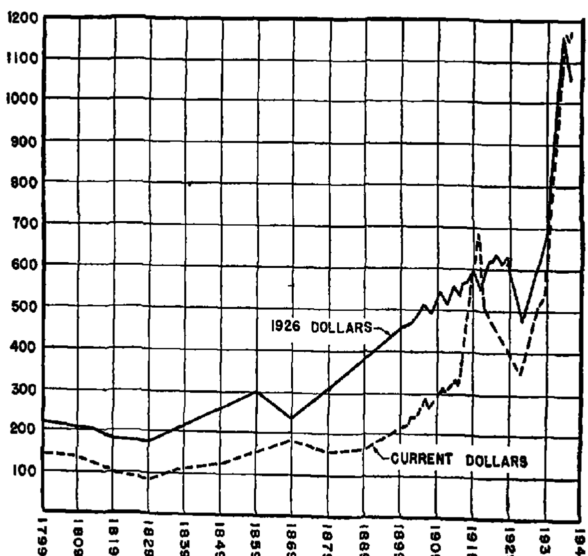

FIGURE 1. Realized National Income Per Capita in the United States.[4]

This is a graphic plotting of the figures in the last two columns of the above table. The heavy line is more significant than the light one because it plots

[4] From the same sources as Table II.

the corrected figures, and thus reveals the growth in per capita *real* income. It is to be observed that, although per capita production sagged in certain periods, the general trend was markedly upward, rising from an index of slightly over $200 in 1799 to more than $1100 in 1945. In other words, it multiplied more than threefold in a hundred and fifty years. This is a phenomenal increase. Statistics compiled by other investigators indicate that the rate of growth of real income in this country over the last two centuries has averaged somewhere between three and three and a half per cent per year.

Limitations of the Statistics.—No columns of figures can possibly give an adequate conception of all the changes that have taken place in the income of the American people during the life of our country. There are too many imponderables that are not susceptible of measurement. For one thing, the figures are distorted somewhat by the fact that, with the passing of the years, many products formerly made in the home (and hence not included in the statistics) later came to be made in factories, and so appeared in the markets (where they would be measured). This error would tend to make the figures exaggerate the amount of increase in income. But this exaggeration is more than offset by errors of understatement. For instance, the figures do not reveal the gains we have enjoyed as a result of shorter working hours; neither do they show the steady improvement that has taken place in the quality of goods that make up the stream of income. This last is a factor of very great importance.

Our Rising Standards of Living.—As a result of the improvement of both the quantity and quality of our national income, the people of the United States have enjoyed a remarkable rise in their standards of living. Similar gains, although not quite so great in amount, have been made by all the peoples of the occidental world where feudalism has been replaced by capitalism.

It needs no lively imagination to visualize the contrast between the mode of life of our people today and that of the feudal English manor or the colonial American farm. The masses of our people live in homes better in many respects than those of the aristocracy of long ago. Central furnaces have replaced open fireplaces or dusty and troublesome stoves. Cooking is done on convenient gas or electric ranges instead of the open fire. Where there used to be bare floors or rag carpets and a few bits of rough wooden furniture, we now have soft rugs, colorful draperies and upholstered sofas. A turn of the button illuminates our houses with electric lights instead of the dim light of the old-time candles. We have operas, theaters, motion pictures, and a host of amusements which our forefathers did not enjoy. We travel readily by fast trains, autos, or airplanes to various parts of our own country, as well as abroad. Improved means of communication, such as newspapers, the telephone, telegraph, and television, keep us in constant

touch with what is going on all over the earth. Modern plumbing and sewage have rid us of the frightfully unsanitary conditions which formerly prevailed, while public health measures, hospitals, and efficient medical service have largely banished the pestilences and plagues which used to sweep whole nations, and have greatly lengthened the average span of human life. In short, we have more freedom, greater variety, and more broadening influences—on the whole a richer life—than the world has ever seen before.

These gains have been shared to a considerable extent by all classes. The American working man of today owns an automobile and has electrical appliances in his home. The farmer has his tractor, his radio, and his telephone. The whole nation is living at levels far superior to anything hitherto known anywhere in the world.

The New Basis of Civilization.—The increase of production pictured in the foregoing paragraphs is *the* great achievement of capitalism. The late Professor Patten suggested that through this progress we are paving the way for the real happiness of the human race. We are passing, he declared, from a state of deficit into one of surplus. By this he meant that man formerly lived in what he called a "pain economy," in which the rigors of existence were so severe, and the presence of economic want so imminent, that most of men's energies were necessarily turned toward the physical needs of life. So long as scarcity of economic goods dominated the world, there was conflict among men which brought out their baser instincts and produced the sterner forms of competition and warfare. Only a fortunate few could enjoy the leisure necessary for the cultivation of the beautiful and ennobling things of life. Even the art and culture of the Greeks was that of an aristocratic class, supported in luxury by the exploited masses, who lived in a state of virtual slavery. But now that technical progress has increased the means of existence so bountifully, we live in a "pleasure economy," where men's energies need no longer be devoted primarily to their mere material wants. If we can increase the economic surplus still further, and bring about its wider diffusion among the masses, all may have enough leisure and wealth to turn their attention to the development of health, beauty, and character in every aspect of their lives. Poverty can be abolished and there need be less clash of classes and nations. So civilization rests upon a new basis of surplus which changes its whole aspect. By providing this new basis, economic progress paves the way for the general progress of humanity.

D. The Failures of Capitalism

Capitalism Not Wholly A Success.—In spite of the progress pictured in the foregoing paragraphs, we cannot view our economic system with perfect complacency. It still has many defects which need to be remedied. Let us examine it broadly in the light of the five tests of social economy that were

set forth above. To meet those tests fully we must: (1) produce an abundance of goods; (2) produce goods of the most desirable kinds; (3) produce the goods at a minimum of material and human costs; (4) employ our material and human resources fully, without idleness and unemployment; (5) finally, when we have done all of these things, we must see to it that the resulting income is diffused widely among the masses of the people. How does our economy measure up to these criteria?

Waste In Production.—Notwithstanding the great achievement of modern industry in the field of production, it falls far short of realizing to the fullest the productive capacity that is at our disposal. This was well demonstrated in the Second World War, when, by a concerted effort, we were able to more than double our annual production. This is shown by the statistics in Table II. Why do we not produce at somewhere near to this wartime level all of the time?

There are many things which interfere with maximum efficiency in industry. The very system of competition which releases individual initiative at the same time makes for unnecessary duplication of plant and equipment. Each enterpriser strives to secure as large a share of the business for himself as he can, without sufficient regard to what his competitors are doing. As a result, there is a multiplicity of small establishments whose aggregate capacity is greater than the market can utilize. Under a better system of organization, with proper coördination, the same output could be secured with a much smaller investment. There is also considerable inefficiency in individual producing establishments. Experts in industrial management tell us that there are many avoidable wastes to be found in the average plant. Defective or obsolete machines, tools, and buildings are widely used. There is great waste of materials, lack of coördination among the different departments, tying up of capital in products that cannot be sold quickly enough because of faulty anticipation of demand, poor handling of men that leads to bad workmanship, expensive changes in personnel, and general inefficiency of labor. Lack of adequate records and accounts, as well as failure to keep up with the developments of research, are other factors making for poor business methods. Lack of standardization of goods likewise makes for waste. This is well illustrated by our railroad history. When each railroad had tracks of a different gauge, frequent transfers of freight were necessary at each point where two lines met. We have eliminated this by a standard gauge track which permits through routing of cars over all the country, but there are hundreds of instances in industry where such uniformity has not been attained. Consider the diversity of automobile models, which necessitates a needlessly large number of dies, machines, spare parts, and so forth. It is estimated that standardizing all newspaper columns to one size would save from three to five million dollars on press composition and the manu-

facture of plates alone. Similar possibilities probably exist in nearly every industry.

Malproduction.—Unfortunately, a large amount of our productive energy is devoted to creating goods which contribute little or nothing to genuine welfare. Such activity may appropriately be called ***malproduction.*** Some of this includes the making of goods not really harmful to men, but which contribute little towards genuinely good standards of living. There are such nonessentials as chewing gum, cosmetics, flimsy merchandise, and gewgaws of a hundred different kinds. To these we may add those superluxuries which are produced only to cater to the whims of the rich—the limousines, private yachts, expensive jewels and so on, whose cost far exceeds anything of real utility which they contribute to the social well-being. When we think of the labor and materials that go into the production of these things, we can realize that this is economic waste. It is not sound economy to be dissipating our materials and labor power in articles of such a nature when there are so many good things which we do not yet have in sufficient quantities.

Not only do we produce nonessentials, but we are also turning out large amounts of things which are positively injurious. These include narcotic drugs, intoxicating liquors, noxious patent medicines, and various other commodities. Along with these there is involved the wasted time of lawyers, corrupt politicians and their kind who are busy keeping out of trouble the people who are engaged in these activities. Let us add the suffering and disease that result from vice, crime and similar nefarious doings. If we could release the labor and capital devoted to all this malproduction for truly uplifting things, it would add enormously to our welfare.

Material and Human Costs.—What has been said about waste in industry above suffices to show that we are not keeping the material costs of industry down to the lowest minimum that our knowledge permits.

Another type of material cost is involved in the recklessness with which natural resources have been exploited in this country. In the early days of our history our resources were so rich that we did not stop to consider that they might someday become exhausted. Hence, forests were ruthlessly destroyed. The richest coal veins were gutted, leaving much other coal irrecoverable under the soil. Petroleum and natural gas deposits have often been so utilized that underground pressure has been reduced to the point where extensive fields have been abandoned with large quantities of oil still in the ground, because it is too costly to pump it out. When we add to these the inadequate use of water power, the reduction of land fertility by soil erosion, the exhaustion of our fish supply, and so forth, it can be realized that the waste involved must be tremendous. Future generations must pay the price.

There is likewise an excess of human costs in industry. Although we are making progress toward the elimination of industrial accidents, the number of injuries and deaths occasioned by mine explosions, whirring machinery,

flying particles, molten metals, and similar factors in industry, that cause blindness, burns, scalds, and the maiming of bodies, is much too large. There is still much occupational disease arising out of unhealthful working conditions. Although the working day has been shortened, there is still a great deal of strain on human muscles and nervous systems from overwork, due not so much perhaps to long hours as to the setting of too fast a pace. The average active life of the workers in some branches of industry is much shorter than it ought to be. And there are subtler costs, such as ennui and discontent arising out of the frustrations which are caused by unpleasant surroundings, the placement of workers in tasks to which they are not emotionally adapted, lack of opportunities for advancement, and so on. We have hardly yet begun to cope with many of these things. Undoubtedly further study of these matters, and the inauguration of reforms offered by such study, will reveal that we can reduce the human costs of industry to a marked degree.

Unemployment.—Perhaps the greatest failure of capitalism is its apparent inability to maintain an even rate of progress. The volume of production, instead of rising steadily, moves by fits and starts, now upward, now downward, as industry moves through alternations of prosperity and depression. During the depressions there is much unemployment of both material and human resources. Industrial establishments close down or operate on part-time, while workingmen are laid off or only partially employed. In every depression several million workers lose their jobs; in the great depression of the 1930's the number of unemployed rose as high as 14,000,000. These are times of great hardship and suffering, leading to serious unrest and radical agitation. Some observers believe that depressions are getting worse as the evolution of capitalism proceeds. A number of economists of wide reputation have even advanced the view that our system has reached a stage of maturity where rapid growth can no longer be expected to take place spontaneously, and where unemployment may become chronic. While this is perhaps too pessimistic a view, it is not to be denied that capitalism has not so far succeeded in meeting the test of full employment, and that this constitutes a very serious flaw in our economy.

This is not the place to analyze the causes of unemployment, but it is appropriate to observe that the uneven character of our industrial progress is aggravated by the malfunctioning of our monetary system. We have seen that the use of money and credit has greatly facilitated the processes of specialization and exchange which are partly responsible for the growth of production. Nevertheless, we shall find that our present monetary and banking machinery is working far from satisfactorily. The monetary system lends itself to inflations and deflations which aggravate the fluctuations of prosperity and depression and which are very disturbing to business. There is

urgent need for improvement in our monetary institutions if production is to be stabilized and full employment is to be attained.

The Prevalence of Inequality.—Let us now look for a moment at our fifth test of economic welfare, which, we said, requires the wide diffusion of income. It is true that the masses of our people have shared partly in the benefits of our increased production. Yet we have in society today a striking contrast between riches and poverty. On the one hand are multimillionaires whose vast wealth enables them to live in incredible luxury and extravagance, with numerous automobiles, lackeyed servants, palatial residences, costly furnishings, and everything else that money can buy. On the other hand we have thousands of people in poverty, housed in crowded, flimsy homes, poorly clothed, undernourished, unable to pay for adequate medical attention, and living in a state of misery and want. The presence of poverty in spite of progress is one of the great paradoxes of our civilization. Hundreds of philosophers have devoted their thought to this problem, and many remedies have been proposed, but still the contrast persists. It is evident that our income is not as widely diffused as it might be. Here is another defect in our industrial system which we must analyze.

Capitalism on Trial.—Although the capitalistic system of industry has brought many improvements over the economic system which preceded it, its failures, as they have just been outlined, lead many people to wonder whether it, too, must not sooner or later give way to another system that will make for still greater progress. We must remember that life is a process of evolution, and that economic institutions as well as other things must change as time goes on. Capitalism itself is ever-changing, so that it is not the same as it was even fifty years ago. What is to be the ultimate outcome of its evolution, and what form of economic organization does it lead to? Must it give way to a new order, such as socialism or communism, or will it retain its essential outlines with minor modifications? We must defer these questions until the closing chapters of this volume. In the meantime we shall consider one by one the points of weakness which reveal defects in the present system of economic organization, and see what measures may be taken to correct them without completely overthrowing existing institutions, or without drastic revolution. We shall then be in a better position to judge our industrial system as a whole, and to point the way toward future progress.

Summary

In approaching the study of economic problems a distinction must be made between pure economics, economic ethics, and applied economics. Pure economics describes the industrial system as it is, without refernce to its goodness or badness or its fitness to perform the functions for which it exists. Economic ethics sets up standards of economic welfare and tests the fitness

of existing economic institutions to perform their functions in the light of those standards, thereby pointing out changes which appear to be desirable. Applied economics utilizes the knowledge of economic principles obtained from pure economics to find means of effecting such changes. It is therefore both ethical and scientific, and involves elements of personal judgment. The point of view of applied economics is a social one; that is, it seeks the welfare of the community as a whole. Although general welfare is difficult to define, economic welfare or social economy consists in (1) abundance of goods, (2) of the most desirable kinds, (3) produced with a minimum of material and human costs, (4) with full employment, and (5) widely diffused among the people.

A comparison of the economic life of today with that of two centuries ago shows a striking improvement in the material welfare of the people. This progress came about through the technical inventions of the Industrial Revolution and the accompanying growth of such economic institutions as specialization and exchange, the use of money and credit, the price system, free enterprise, competition, private property of both tangible and intangible sorts, money wages, and the employer-employee relationship. These constitute the basic features of capitalism. Under this system production has made a remarkable growth, as indicated by the increase of income shown by statistics. Civilization is on a new basis of surplus which gives opportunity for lives of greater leisure, wealth, and enjoyment.

On the other hand, our economy shows numerous failures. There is much inefficiency and waste in industry. We produce many goods of nonessential or deleterious kinds (malproduction) The human costs of industry are too high and there is a serious problem of unemployment. Finally, there is extreme inequality of incomes. These defects of capitalism raise the question whether it will eventually be superseded by some other form of economic organization.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

An interesting brief treatment of the nature and scope of science is J. A. Thompson's essay "Science and Modern Thought," in Volume 4 of his *The Outline of Science* (1922) An able discussion of the scientific method in economics and the relation between pure and applied science in this field is contained in Chapter II of J N. Keynes' *The Scope and Method of Political Economy* (London, 4th edition, 1917) Lionel Robbins' *The Nature and Significance of Economic Science* (London, 1932) is a brilliant analysis of its theme. In her delightfully written *Lament For Economics* (1937), Barbara Wootton takes economists to task for their shortcomings and makes a plea for more emphasis on welfare Similar in point of view are J A Hobson's *Work and Wealth* (1914), especially Chapters I and XXII, and George H Soule's *The Strength of Nations* (1942).

Arnold Toynbee's *Lectures on The Industrial Revolution* (10th edition, 1894)

is a standard classic on the transformations of the eighteenth and nineteenth centuries For a more modern, elementary treatise see George M Modlin and Frank T DeVyer, *Development of Economic Society* (1935) Statistics of annual income in the United States are to be found in W I King s *The Wealth and Income of the People of the United States* (1915), Robert F Martin's *National Income in The United States, 1799 1938* (1939), Simon Kuznuts' *National Income and Capital Formation, 1919 1935* (1937), and in various publications of The United States Department of Commerce, including monthly series in *The Survey of Current Business* A clear and illuminating discussion of the concept of national income, its measurement, and its significance, is given in Part IV of J R Hicks and A G Hart's *The Social Framework of the American Economy* (1945)

A brilliant picture of the achievements of capitalism is painted by Carl Snyder in his *Capitalism, The Creator* (1940) Simon N Patten's *The New Basis of Civilization* (1907) is a stimulating book, painting an optimistic picture of the possibilities for welfare created by our economic surplus Stuart Chase gives a challenging revelation of the wastes prevalent in industry in *The Tragedy of Waste* (1925) For a critical analysis of some of the weaknesses of capitalism see Richard H Tawney's *The Acquisitive Society* (1920), and the literature of socialism cited at the close of Chapter XXVIII

Note The suggested readings appended to the chapters of this book are not intended as a complete bibliography, but merely as a guide to teachers and students who desire to read a little further on the subjects discussed At the same time they serve to make acknowledgments, where due, to particular sources from which the authors have obtained valuable material or suggestive ideas in preparing the present volume.

PART II

IMPROVING THE PRODUCTIVE ORGANIZATION

CHAPTER II

Efficiency in Management

A. The Nature and Purpose of Scientific Management

The Problem of Business Efficiency.—The first criterion of social economy set forth in the previous chapter was abundance of goods. The attainment of this objective depends partly on the effectiveness of the economic organization as a whole, but it also depends to a very considerable degree upon the efficiency with which each separate business establishment is conducted. The latter is a problem of industrial management. Efficiency requires that the management of each firm be in the hands of the most competent executives, and that these executives use the best managerial techniques that are known. It is the purpose of this chapter to outline very briefly what those techniques are.

The Beginning of Scientific Management in the Work of Frederick W. Taylor.—Prior to the twentieth century, the managing of an industrial plant was based mostly on the common sense and experience of the operating executives. There was no generally accepted system or set of principles. In the first decade of the 1900's, Frederick W. Taylor conceived the idea that many of the operations of production could be performed much more efficiently if they were scientifically studied and systematically directed. It is now universally admitted that his pioneer work laid the basis for the body of principles and methods in industry that are embraced by the term scientific management. The increasing application of these principles and methods is a movement of tremendous significance, which owes its original inspiration to the work of this one man.

Taylor's experience while in the employ of the Midvale Steel Company in Philadelphia convinced him that workers were not giving to industry the best they had to give. He believed that this deficiency was due in part to the lack of information as to just what was a good day's work and how it should be accomplished. To impart this information is a function of good management, but it is a duty that is seldom fulfilled. Taylor crystallized his thought into four broad principles:

"First, the development of a science for each element of a man's work, thereby replacing old rule of thumb methods.

"Second, the selection of the best worker for each particular task, and then training, teaching, and developing the workman; in place of the former

practice of allowing the worker to select his own task and train himself as best he could.

"Third, the development of a spirit of hearty coöperation between the management and the men in the carrying on of the activities in accordance with the principles of the developed science.

"Fourth, the division of the work into almost equal shares between the management and the workers, each department taking over the work for which it is the best fitted; instead of the former condition in which almost all of the work and the greater part of the responsibility were thrown on the men."[1]

At the Midvale plant Taylor began his experiments by making a study of the use of cutting tools in the steel industry, and the findings were later published in a now famous article, *The Art of Cutting Metals.* This article, together with his little book on *Shop Management,* constitutes both the beginning and the foundation of scientific management. In his study of steel cutting, over fifty thousand recorded experiments were made, and over eight hundred thousand pounds of iron and steel were used. The work was later continued at the plant of the Bethlehem Steel Company, and the total period of experimentation was about twenty-six years. The results obtained revolutionized the whole steel industry, the discovery of high-speed steel alone having practically a revolutionary significance. The famous illustration of time and motion study applied to handling pig iron, recited below, was made during the period of Taylor's employment at the Bethlehem Steel plant.

The Scientific Method in Industry.—The scientific method implies the solving of a problem by seeking all the facts obtainable, classifying those facts, and drawing conclusions warranted by them. The essence of science is the explanation of an effect in terms of causes, growing out of the subject matter analyzed. Industry must solve its problems, not merely by guesswork, intuition, or that vague fund of knowledge called experience, but by gathering industrial data, classifying those data, and drawing conclusions which will serve as a basis for future activity. To meet its responsibility, management must apply the scientific method to industry, in its approach both to the problem of physical plant operation and to the problem of the human relations within the plant. An industrial enterprise must be scientifically managed in both its physical and human aspects.

It seems strange that industrial leaders had not only to be taught this method, but also to be convinced of its practicality. To illustrate, men were, and still are, frequently hired simply by selecting at random the required number from the numerous applicants for work. Often the only training obtainable is actual experience on the job, plus some advice by fellow-employees. Methods of promotion to better positions of responsibility are

[1] F. W. Taylor, *Principles of Scientific Management* (1919 edition), p. 13.

often developed little beyond the process of the foreman or superintendent picking out the "men that look good." Taylor found, in addition, almost no accumulated knowledge resulting from scientific investigations as to the efficiency of various types of machinery and of various methods of operation. Industry depended on the crude working out of the doctrine of survival of the fittest as the means of maintaining general efficiency. The effect on the workers was disastrous.

The four principles of good management stated by Taylor struck at the very roots of these inefficient policies. As to his first principle, instead of each man doing his job in his own way, each job was to be scientifically studied until, by experimentation, the one best way to complete the work was found. Secondly, this one best way was to be taught all men doing the job, and they were to be told just how long it should take to finish each appointed task. New employees were to be selected after thorough examination as to physical and mental health, along with practical trade knowledge. Each man was to be selected with the different requirements of the job he was to fill in mind. Thirdly, management was to make a strenuous effort to convince the workers of its interest in their success; coöperation between men and management is necessary to maintain a high morale in a plant. And, finally, whatever the profit resulting from the scientific management, both men and management should share in it according to some prearranged plan. This same method, Taylor insisted, should be applied to the selection and utilization of equipment. The illustration above given, of the art of cutting metals, indicates the method to be followed. Management experts who followed Taylor carried his ideas into every phase of modern business. Not only the production department, but also sales, purchasing, accounting, credit, and all other departments must make use of the same methods, adapted, of course, to their respective types of work. Industry of the future must be operated with the same scientific method a skilled chemist makes use of in his laboratory.

Some Limits to Efficient Management.—The managers of a single firm do not find the road to efficient operation unobstructed. In the first place, an important limitation is found in the scarcity of available talent. A small army of men must be obtained to supply managing officials for the hundreds of thousands of business enterprises. Is the inefficiency of the average business to be attributed to ignorance and lack of "professional" training, or is the real culprit the scarcity of such ability? Every business executive must function within the limitations of his own native capacity, so it may well be that human deficiency is at the root of the problem. Secondly, the remarkable growth of industrial integration and imperfect competition (to be described in Chapter III) has had the effect of tying the hands of management. For example, where restrictions on the marketing or pricing of goods rule throughout an industry, a damper is unquestionably placed upon wide-awake

plant management. A third limitation, of fast growing importance, exists in the restrictive controls exercised by strong labor unions. Management often finds that plans for improving output per man conflict with union policies, especially with respect to methods of wage payment, selection of employees, and the introduction of technological improvements. If union organization of foremen becomes general, then, irrespective of the broader issues involved, management will face the loss of some control over the only "management man" the average worker ever meets in normal plant operation. Fourthly, the level of demand for the finished product may place a definite limit upon the scale of operations and upon technical methods of production. In an age of automobiles, it is much easier to reach a highly efficient scale of manufacturing than it would be to accomplish the same level in the production of horseshoes or horse-drawn farm wagons.

Finally, numerous more remote factors in the social structure influence and limit the operation of an enterprise. The pattern of the legal framework surrounding industry is one such factor. With the evolution of such governmental administrative agencies as the Social Security Board, National Labor Relations Board, Securities and Exchange Commission, and the wartime Fair Employment Practices Commission, the legal environment in which management must function is becoming more circumscribed. This is not to criticize these measures; they represent an aroused social conscience for a better world. We merely record that one consequence of such institutions is restraint of managerial freedom of action and increased complications in the conduct of enterprise. The cyclical ups and downs of business prosperity and depression constitute another limiting factor whose impact varies widely from industry to industry, and from product to product.

For all these reasons, we must not expect complete conformity to ideal standards in every business enterprise; management is entitled to some consideration for its shortcomings.

The Obligations of Industry.—In any study of industry, especially a study of the management of industry, one should keep in mind a three-fold obligation of the managers: the obligation to investors, to the workers, and to the public. No business under the modern system of enterprise can succeed unless it makes a profit. High ideals will elevate the tone of industry, and there is much that can be accomplished in this direction by industrial managers, but unless at the end of the fiscal period the books show a profit, the business is not long going to hold its place in industry. Profit must be earned if a business is to survive. The obligation to the workers is that they must be treated as human beings, not merely as cogs in the industrial machine.

To illustrate, an official in an American steel company some time ago stated that unless the immigration bars were let down, costs of production would become prohibitive in the steel industry, making its survival difficult. Now, cost of production in this sense meant high wages, and a wage is a

man's living. So what this official actually stated was that unless the immigration bars were let down and the standard of living of steel workers reduced, the steel industry, in his opinion, could not survive. Such a statement brings to one's mind a very different picture from the wording actually used. It *may* still be true, granting the truth of the facts of the case, that the steel industry should be maintained and not allowed to suffer too much because of increasing wages. However, such a problem should be faced frankly, recognizing that we are dealing with standards of living of people and not with inanimate machines, as implied in the phrase "costs of production" Industry also owes a deep obligation to the public, because the whole function of industry is to create the means whereby human wants can be satisfied. The success of the industrial organization must, in the last analysis, be judged in terms of social welfare.

B. The Techniques of Scientific Management

The Essentials of Good Management.—It would be both impossible and unprofitable for us to make a detailed analysis of the entire field of industrial management. Our interest is in ascertaining how the productive process as a whole can be improved and the efficiency of the economic order enhanced through good management. Industry is nothing more than a collection of many thousands of privately owned and managed industrial plants, some large and others quite small; hence a study of management must take the individual plant as the basic unit. This means that the broader aspects of the reorganization of industry are not here under consideration. The principles of scientific management are limited to improvement in the efficiency of plant operation within the present framework of society, and we must recognize that the immediate objective of management is to get greater profits for owners and employers The broader (and perhaps more important) questions of industrial reorganization and control must be reserved for separate study in later chapters.

By "good management" we mean the methods found in those plants which may be classed as above the average in efficiency. We are not concerned with ideal standards in an imaginary, perfect world. The experience and accomplishments of the best industrial enterprises now in operation must serve as the measuring rod In the following pages, seven aspects of efficient industrial management will be considered (1) the selection of the best location; (2) the use of the best building and equipment, (3) the adoption of the most suitable plant organization; (4) efficient planning; (5) scientific job study, (6) modern methods of wage payment; and (7) effective management research

Plant Location.—The industrial plant that is poorly located is operating under a serious handicap The best location for a given plant is dependent

on many variables, including the sources of raw material, the sources of power, the market for the finished product, the labor supply available, the climate of the region, and transportation facilities Just which of these influences are the most important depends on the nature of the industry and the product of the plant in question. A plant that is making a product of very high value and small bulk, such as jewelry, can locate wherever it is most likely to find the skilled type of labor required. Nearness to power, raw material, or the market would be of relatively little importance, because the transportation charge would constitute but a small fraction of the total production cost. On the other hand, plants producing commodities of great bulk and small value must be located near the market in which they are to be sold, or transportation costs become prohibitive. Chemical plants need power as their prime production requisite; they have tended to concentrate around Niagara Falls and other locations possessing cheap effective power The manufacture of paper pulp requires lumber, which is expensive to transport, and also cheap power Pulp plants, therefore, are usually found right on the edge of, or within, the woods; and as the sources of timber are utilized, the mills tend to shift to other localities not yet exploited. The milling of flour tends to concentrate around the twin cities Minneapolis and St. Paul, because of their central location with reference to the wheat-growing area of the United States

The location of a plant within a city has many decided advantages. The labor supply is plentiful, and if the industry is one that can make use of women and girls, the city offers a cheap supply of workers. There are many economic and social advantages for workers that go with city life—good schools, churches, theaters, and other amusements can be developed more effectively where there is a dense population. Fire protection, transportation facilities, and banking facilities are also more satisfactory The city furnishes near at hand a large market, and the concentration of industries in that market means that repair shops and sources of equipment supplies are close by, for they tend to concentrate where the industry itself is concentrated. The city has, however, many disadvantages as a location. Rents are high, the price of land is high, taxes are high; and often numerous municipal restrictions are placed on the conduct of industry. There is also the difficulty of later expansion, since it is hard to obtain vacant land near the original plant in a densely populated area.

A country location consequently offers some advantages. Cheap land, low rents, low taxes, and lack of legal restriction are to the business men advantages worth considering. Many small localities give land away or give exemption from taxation for a period of years to industries that will locate there. But the difficulty of obtaining adequate labor and the lack of practically every advantage that the city offers counts heavily against the country district. Suburban sites frequently have many of the advantages of the city

and the country without the disadvantages of either. The near-by city supplies the facilities of city life, and the open suburban area supplies the advantages, at least in part, of the country district. Factory and community can be planned with a view to future expansion, and the happiness and well-being of the employees adequately cared for.

Once an industry has located, other plants carrying on the same line of work tend to drift to and locate in that same locality. There are very decided advantages in such geographic specialization. A specialized labor supply develops. Equipment industries gather near by. Buyers visit in great numbers, since they can quickly examine the products of many different plants. A general trade knowledge of the particular industry in question can be exchanged through the coöperation of the various plants. The main difficulty is the tying up of an individual plant too closely with the industry as a whole. A slump in the industry is going to have a more direct effect on all the plants than would be likely if each one had its own community problems to face. Examples of geographic specialization can be found almost anywhere. The collar and shirt industry at Troy, New York, watch-making at Waterbury, Connecticut, and the shoe industry at Lynn and Brockton, Massachusetts, are good examples. In many cases it is impossible to find an adequate explanation for the localizing of industry, other than the accident of an early start. Each plant faces problems peculiar to itself, and each one has to weigh and balance the advantages and disadvantages involved in its own particular case.

Industrial expansion during the period of the Second World War had a very profound effect on the distribution of industry in the United States. Areas that had never developed industrially became thriving communities with government aid. Over ten million persons moved their homes and transformed such areas as southern California, Michigan, and the Deep South. The repercussions of this movement on industrial location must be given consideration by wide-awake management. Are the new industrial sections permanent, and what will be the consequences upon the older established regions? Managers must ask themselves these questions, and adapt their long-range plans to regional changes.

The Building and Its Layout.—The old dark, gloomy factories that still can be found along the streams in many of the manufacturing sections of the East are rapidly disappearing. The modern plant is a structure that gives the appearance of being almost entirely composed of windows. The use of concrete has made it possible to develop a sturdy building and at the same time give a maximum amount of daylight. The use of fire doors, fireproof materials, and sprinkler systems has reduced greatly the fire hazard in well-equipped and well-built plants. Just what the size of the plant should be, and how the work should be laid out, depends entirely on the individual industry and the nature of the product. The problem for a factory producing

a liquid product is different from that of one producing a solid product. A bulky product creates a different problem from a small, light-weight product. If the industry is primarily assembling parts, as in some phases of the automobile business, the problem is different from that of an industry of the continuous production type, such as the milling of flour, the refining of sugar, or the slaughtering of cattle. In the latter cases, each step in the process requires the addition of a form utility to the semi-finished product. The layout of the factory should be such that each operation takes place in close proximity to the next operation, so that the minimum cartage and space is used. In the Ford assembling plants, the product is started on its way at the top of the building, and by gravity it moves gradually down to the lower floors. The assembling takes place as the product passes through each department of the plant.

Plant Organization: The Military Type.—Coordination and supervision of the working force must be developed to a high point through a modernized method of organization. In general there are three types of organization made use of in industry They are known as the military, the functional, and the line-and-staff organizations.

In the military type of organization, all the authority centers in, and flows from, the chief at the head of the organization The minor executives derive their authority directly from the chief, and the foremen derive their authority directly from the minor executives. The foreman is responsible for the workmen's activity. The organization is distinctly militaristic in this flow of authority directly from the top to the bottom, with the head of the organization responsible for the entire operation. The defect of such an organiza tion is found primarily in the responsibility placed upon the foreman. A foreman, under the military system, should possess all the attributes and abilities of a good plant superintendent. The securing of an abundant supply of foremen with such abilities and capacities is difficult, if not impossible Put in another way, the military system lacks specialization; and with the failure to make use of specialization, efficiency is lost. The advantage of this type of organization is in the direct line of responsibility established It seems to work satisfactorily in a small shop.

The Functional Organization.—The scientific approach to the problem of management led Taylor to the conclusion that the most satisfactory form of organization would be one based upon the different functions that must be performed within an industrial organization. He believed that functional management consists of so dividing the work of management that each man, from the assistant superintendent down, would have as few functions as possible to perform. The most marked outward characteristic of functional management lies in the fact that each workman, instead of coming in direct contact with the management at one point only—the foreman, receives his daily orders and help directly from several individuals, each of

whom performs his own particular function. In a machine shop, for example, the workman would come in contact with a gang boss, a speed boss, an inspector, and a repair boss. The gang boss is responsible for the setting up of the work in the machines accurately and quickly, and the removal and disposition of the piece after the operation is complete. The speed boss is responsible for the work while in the machine; that is, the act of operation. The inspector is responsible for the quality of the work, and both the workmen and the speed boss must see to it that their work suits the specifications of the inspector. The repair boss is responsible for the maintenance and care of the machines and their accessories. In addition to these production bosses, there are in the planning room four other bosses, known as the order-of-work clerk, the instruction-card man, the time-and-cost clerk, and the shop disciplinarian. The order-of-work or route clerk is responsible for the route of the work through the shop, from machine to machine, from the time production starts to the final assembling. The instruction-card foreman is responsible for any difficulties arising out of the use of the instruction card. This card tells the workman exactly what he is to do and the method of doing it—the cuts, speeds, feeds, and other directions necessary for the completion of the work as planned by the management. The time-and-cost clerk sends, through the instruction card, all the information needed by the workmen for recording their time and the cost of the work. The shop disciplinarian, as implied by the title, has charge of cases of insubordination, repeated failure of workmen to do work, lateness, unexcused absences, and similar delinquencies. Thus the workmen comes into contact, under a functional type of organization, with eight different supervisors.

The advantages acquired are those that go with specialization. The bosses can be better trained and more quickly taught their work. The degree of ability required by a foreman is reduced, since he need learn only a particular function, and a man can be selected whose capacity is in line with that function. Responsibility is placed on the basis of the functions; and if any particular part of the work fails to maintain its proper standard in the organization, it is very easy to place one's finger on the responsible party. The individual workman also gets better supervision, for specialists in each line are constantly watching him, ready to point out and demonstrate, if necessary, the best way of accomplishing the task that is set before him.

The difficulty of the system is readily apparent. Can a workman serve several bosses at the same time? Many industrial leaders have voiced strong opinions to the effect that workmen cannot satisfactorily obey several people, each one having practically exclusive authority of a certain phase of his activity. Taylor and some of his followers have denied this charge, but it has been strong enough to prevent the general adoption of the functional system of organization in industry. A second difficulty is the tremendous amount of clerical work necessary if the system is to operate correctly. Con-

stant checking and filing is required. Many employers believe the cost involved in this clerical work is greater than the gain to be secured.

The Line-and-Staff Organization.—A combination of the military with the functional type is called the line-and-staff organization. It is the outgrowth of actual industrial experience. Employers were loath to put the men under several bosses, and yet they recognized the decided advantage of an industrial organization built on the principle of difference in function. Professor Lansburgh has described the line-and staff organization as follows.[2] "Under the general manager or operating head of the enterprise there is an immediate split into divisions of operation functional in form. There is, for instance, the comptroller who deals with all office, accounting, and record operations; the manager or director of manufacture, who has under his control all matters relating to plant organization and the manufacture of products; the director or manager of distribution, who controls sales; and in many modern organizations, the director of industrial relations, who deals with all matters concerning personnel. In this development of the main operating organization, it will be noted that there are but few divisions, which means that there will be few persons reporting directly to the general manager This is an essential of good organization." If there be any phase of the committee idea installed, these heads of divisions will, together with a few other key men, form the Plant Advisory Committee. These, in turn, will be assisted in the formulation of policy for and operation of their own division by advisory committees. The division of an organization into departments avoids the duplication of bosses, gives direct responsibility from top to bottom, and yet recognizes and makes use of the functional line of demarcation in the work of managing the plant. The line-and-staff form of organization is the one that has the support of the majority of the experts in the field of industrial management, and it constitutes what we may call the best practice at the present time.

Levels of Management Organization.—Any type of organization, or combination of types, develops a hierarchy of managerial personnel. There are several layers, or levels, of control from top to bottom They exist because of the limitations of human nature. The span of control for which each individual can assume responsibility is limited by his knowledge, energy, and personality. A man may be a marked success at one level and yet fail at a higher level to which he has been promoted; he has been pressed beyond his capacity, or span of control. When an organization grows in size, the number of individuals needed at one level multiplies, so that departmentalization comes into the line organization by a natural evolution. As in any economic institution, differentiation and integration go forward simultaneously. These simple truths, plus the technical problems inherent

[2] Richard H Lansburgh, *Industrial Management* (1928), p 59

in the production of a specific product, probably account for the wide variation of organizational types found in actual practice. Each individual plant has its own special problems and any attempt to establish one of the three technical plans of organization without considerable modification would lead to inefficiency of operation. Modern management demands the intelligent adaptation of the ideas in any or all plans, to meet the specific needs of a given situation.

The Importance of Planning.—Careful planning is the very heart of scientific management. Management must satisfy the customers with respect to design, quality, quick delivery, and price; but in accomplishing these objectives a conflict must inevitably arise with a quite different objective—low costs of production. Efficiency demands that every aspect of the business be carefully planned in advance, and effective controls must be established to insure proper adherence to the specific provisions of the plan that is adopted. On the production side, for example, management must consider the priority of manufacturing orders, the preparation of materials for the filling of these orders, the setting up of the necessary equipment, and the provision of trained workers. All must be planned far in advance so that production will proceed steadily. Routing clerks arrange the path of the materials through the plant and designate who shall do the work; scheduling clerks designate when each operation shall be performed and how long each shall take to complete; despatching clerks provide for the efficient use of equipment and men, and see that the plans of the routing and scheduling clerks are carried out. Where the belt conveyor system can be used a mechanical control is provided for the speed of the conveyor, which will require every worker "on the line" to maintain a steady pace. It is a fascinating sight for the uninitiated to watch the progress of a motorcar from the time the first unit of the chassis is placed on the conveyor to the last operation of placing gasoline in the tank and driving the assembled car off the line on its own power. Where such mechanical controls are impossible, considerable clerical work is essential, giving rise to a system of cards and records which guide and control progress through the process of production. Follow-up work is an important part of this aspect of control.

But planning is not restricted to the physical production or form utility activity of a plant. Every part of the plant, from budgeting by the finance department to the forecasting of demand and distribution by the sales department, requires intelligent planning and control, for the rewards of success are great and the penalties for failure heavy. Wise planning and control reduces the size of inventories that must be carried, prevents idle capital and idle men from adding to costs, reduces unnecessary waste, and keeps the business abreast with consumer needs. Many experts advocate the concentration of all planning in one department, and this appears to be the rule in small plants. But large establishments tend to decentralize con-

trol, or to use a combination of centralized and decentralized organization. This latter policy permits a general coordination of activities without danger of the planning men losing touch with the actual conditions of operation.

Scientific Job Study.—It is in the approach to the individual job for the individual worker that the fame of scientific management has largely rested It is here that Taylor did his best work in applying scientific principles to the problems of industry According to Taylor, there are four principles that must be kept in mind if the desire of the employer to obtain what he wants—low labor cost, and the desire of the worker to obtain what he wants—high wages, are to be secured "First, each man in the establishment, high or low, should daily have a clearly defined task laid out before him This task should not in the least degree be vague or indefinite, but should be circumscribed carefully and completely and should not be easy to accomplish Second, each man's task should call for a full day's work and, at the same time, the workman should be given such conditions and appliances as will enable him to accomplish his task with certainty Third, he should be sure of large pay when he accomplishes his task Fourth, when he fails, he should be sure that, sooner or later, he will be the loser by it"[3] The first two of these principles require scientific study as to the best way of doing the job, the planning of work ahead, and the giving of careful instructions to the worker as to how to proceed The last two principles necessitate the development of a system of wage payment which rewards good work by extra pay and penalizes unsatisfactory work in some manner

A considerable part of the restriction of production in industry, resulting from the failure of the men to work to the fullest extent of their capacity, grew out of the failure of management to have an adequate understanding with the men as to just what constituted a fair day's work If the workers worked too hard their rates were cut, management feeling that they were earning too much, and after the rates had been cut several times, the worker simply solved the problem by keeping up a fair rate of speed and refusing to increase the output beyond that point Each man worked in his own way with whatever knowledge he had picked up through his contacts with other workmen or through his own experience in work at the trade The scientific way of going at the problem of the individual worker's job is to find out through experimentation the one best way the job can be done All the workers on each kind of work can then be taught this one best way A careful analysis of the motions involved in a certain operation, making use of the stop watch to record speeds, will yield a fund of data that will serve as a basis for generalizing as to the best way of doing that operation or job After allowing for rest periods and other necessary causes of lost time, a fair day's work can be determined, and all the employees, after being

[3] F M Taylor, *Shop Management* (1911) p 1368

taught the new method, can be held strictly to such a standard in their performance. Such a standard is not a guess. It is not the result of custom. It is not due to the whim of the employer. It is the result of scientific study.

Two examples will serve to illustrate the method. The most famous of all time and motion studies is that made by Taylor in the unloading of such materials as ore, gravel, coke, pig iron, and sand from railway cars, and the shoveling of these materials upon piles for use in the blast furnaces of the Bethlehem Steel Company The simple operations of this work were: picking up of a shovelful of material, walking with it on the level some distance, throwing it down either into a car or upon a pile, and walking back again to get another load But this work was analyzed as a time-and-motion study, with a view to ascertaining the most efficient way in which it could be done. The average production per man was from twelve to thirteen tons of pig iron a day. After the study had been made, and the results put into operation, the men doing this work were carrying and loading from forty-five to forty-eight tons per day, and apparently with less strain and effort than previously required in carrying the smaller quantity. Their earnings increased about sixty per cent A second interesting study of a very simple job was made by another expert in the handling of outgoing mail in a large office[4] The saving of just one motion per letter is important when several thousand are mailed a day Before the study was made the girls were permitted to fold and seal the letters in their own way A short observation of their work showed there was much room for improvement. Each motion required to fold the letter, pick up its inclosure, pick up the envelope, and insert the letter in the envelope, was carefully analyzed and an effort made to improve on the existing practice After the final work on the experiment was done, the output was four times greater than it had been when the girls were allowed to do the work in their own way

There are other merits which result from these studies. Motion analysis brings out clearly the strong and weak points of equipment. The studies furnish excellent bases for establishing incentive wages which induce the workers to exercise their full capacities by the assurance that they themselves will profit by their effort Difficulties of course exist. It is always rather hard to determine just what the allowance for fatigue should be. Our modern studies of fatigue in industry indicate that the development of poisons in the blood, resulting from overwork, not only affect the efficiency of the worker at the time, but tend to accumulate in the system and reduce the life and efficiency of the employee The advocates of scientific management declare that this can be allowed for, and that a properly managed plant, using the most improved methods, will, on the whole, show a gain in the average health of the employee.

[4] Cited by R H Lansburgh, *op cit* p 242

Methods of Wage Payment.—High wages do not necessarily mean high labor cost, nor do low wages necessarily lead to low labor cost. A high wage per man may mean a small labor cost per unit of product, if the worker is efficient and working under the best possible conditions. A low wage paid to a man who is very inefficient and working with unsatisfactory equipment, under the supervision of inefficient management, may well result in a high labor cost per piece. The aim of good management is to keep down the labor cost *per unit of output,* not the labor cost *per man.*

The two basic methods of wage payment are the time-rate method and the piece-rate method. The time-rate method means paying the workman a specified amount per hour, per day, or per week, regardless of his output. The workman knows ahead of time exactly what he will earn. Under the piece-rate system the worker is paid a specified amount per piece completed. His wage then depends on the number of pieces he turns out. If he works fast, his wage is high; if he works slowly, his wage is low. The difficulty with the time rate is that it encourages laxity on the part of the worker. The difficulty with the piecework rate is that the worker tends to put out a defective article in his rush for a high record of output. Piecework must always be inspected, therefore, very carefully; and most plants have very elaborate systems of inspection when they operate under the piece-rate method. From the worker's point of view, piecework has a disadvantage in that it tends to drive him. Under the time-rate system the foreman must be employed to keep the worker busy, but under the piece-rate system the worker drives himself.

In an effort to meet the difficulties of some of the older methods of paying wages, many experiments have been made with the *incentive wage-rate* plan. An incentive wage-rate plan is one that seeks to make the worker's wage directly dependent on his efficiency. The Halsey Premium Plan is one of the best-known of these systems. On the basis of the average previous time of doing a job, a standard time is set, and the workman is paid a basic rate for completing the job within that time. If he completes the job in less than the standard time, he is paid a premium in addition to his hourly or daily rate. This premium is a certain percentage (usually from a third to a half) of the additional wage he would have earned had he worked the full standard time. The Rowan Premium Plan is similar, but differs in its method of calculating the premium. If the time for completing the job is cut to forty per cent, the premium is forty per cent. A third method is the task and bonus system. Under this method the task is analyzed under a time-and-motion study and a standard time agreed upon for its completion. If the task is accomplished, the workman receives a bonus in addition to his regular hourly wages for the time worked. The greater the time saved, the greater the bonus. If the workman fails to complete the job within the standard time, he is paid only the basic rate and forfeits the bonus. His

case is then investigated and an effort made to correct the cause of his failure.

Whatever be the method of wage payment adopted, it is important that it be used fairly, and not as a device to speed up workers and cut the general wage level. Once the workers obtain the idea that they are faced with a scheme to bring profit to the employer at their expense, the system is doomed to failure. During the period of transition while adopting a new method, wages should be increased slowly at first, for the effect of creating an unduly high rate and then later being forced to lower that rate creates a very unsatisfactory condition in the worker's mind, even though the final rate is higher than what he was originally earning.

Management Research.—The earlier conception of scientific management as a "system," with "efficiency experts" as the directing force, has given way to a broader point of view. As stated above, modern management applies the ideas of Taylor to every phase of plant operation. In place of a rigid set of plans, we find the emphasis upon an inquiring state of mind. The result has been a continual increase in the stress placed upon experimentation and research. This research touches every aspect of management —general administration, merchandising and selling methods, clerical operations, and physical production. Many firms maintain very elaborate research staffs.

C. The Management of Personnel

The Point of View.—The management of an enterprise is not just a matter of utilizing the physical plant, equipment, and materials. Living men must be supervised as they perform the duties of plant operation. The economist in his study of the problems of plant personnel is faced with several possible approaches not always in harmony with each other; and divergent viewpoints give rise to conflicting objectives. On one side we have the interest of labor as an economic group—the desire for higher wages, better working conditions, and the whole gamut of aspirations of organized labor. On the other side is the interest of the management and owners. Here the primary goals are high managerial salaries, large profits, and maximum security of invested funds. Cutting across the whole pattern is the broader interest of the general public. As consumers we desire low prices, improved quality, and a maximum output of goods and services. If a new machine is invented, labor naturally seeks to protect the workers' job against displacement by the new device; management strives to retain as large a share as possible of the gain from it, even if output restriction is necessary; and the consumer looks for a larger output at lower prices.

Each of these separate viewpoints must be examined in a well-rounded analysis of industry. Several chapters of this volume are devoted to the labor movement. The consumer's interest runs recurrently through other chap-

ters. In the present chapter, we are confining our attention to the personnel problem as an aspect of the efficiency of a single enterprise. We want to inquire what management can do to create and maintain a relation between employers and employees that is consistent with a high level of efficiency and profitable results for the owners of the enterprise. This means that to a certain degree we here take the point of view of owners and managers, but only in so far as that is consistent with the general welfare.

Personnel Administration.—The branch of industrial management that deals with human relationships and attendant problems in an industrial enterprise is called personnel administration. It has been defined as "That branch of an administrative organization which is primarily concerned to enlist the energy, interest, and good will of all the workers in the organization, to the end of forwarding the defined objects of that organization with the minimum of effort and friction, and with due regard for the welfare of the workers."[5] The primary objective of personnel administration is to increase profits, but to achieve that objective it is necessary to maximize the productivity of the individual employee by the maintenance of a working environment in conformity with the human aspirations of all workers within the plant. Thus it is not necessarily inconsistent with the welfare of labor.

The Functions of Personnel Administration.—The chief functions of the administrators of personnel are concerned with employment, promotions and layoffs, health and safety, education, research, employees' services, and employees' representation in plant management. In many large enterprises the responsibility for all of these functions is centralized in one department and the head of that department holds a position of high rank in the organization. This is the case in such well-known companies as Procter and Gamble, The Standard Oil Company of New Jersey, and the Dennison Manufacturing Company. Where the geographic location of the separate producing units spreads over a wide area, the personnel work is frequently decentralized. This is the practice followed by the Du Pont and General Electric companies. However, a breaking up of the various functions within a single plant at one location is not considered good management; divided responsibility weakens effective administration. Concentraton of responsibility in an official of high rank permits coördination of all personnel activity and the adoption of general policies for the enterprise as a whole.

Unfortunately, a large proportion of American enterprises have not as yet adopted personnel work as wide in scope as the above. All too frequently, the sole responsibility of the personnel staff is the employment service. This is especially true in times of depression, when personnel work may be considered a "frill" that can be eliminated in the cause of economy. However,

[5] Ordway Tead, "The Field of Personnel Administration," in *Bulletin of the Taylor Society*, Vol. 8, no. 6, December, 1923.

the degree of development of personnel work varies widely from plant to plant, becoming generally more important as the size of the enterprise increases and the personal contacts of management officials with employees becomes necessarily more tenuous. In a great industrial plant the only point of contact between management and men is at the foreman level; hence the personnel department must devote much of its time to building a strong group of foremen, who will be on good terms with the higher managing officials.

Employment and Placement of Workers.—Perhaps the weakest spot in the nonscientific plant's treatment of the personnel it employs is the haphazard way in which the hiring of new employees is conducted. Often the employment bureau is nothing but a place for applicants to report, and the hiring decision rests with the individual foremen. Frequently the employment office is placed in charge of a man with no training whatever along that line. In many cases an old employee who cannot be used elsewhere is given the job, as a sort of pension. Foremen and poorly trained employment managers will not build an effective working staff.

Job Specifications.—The employment division should have in its possession a very carefully worked-out list of specifications for every job for which they may have to supply a worker. These specifications should be carefully written and kept on file. They should describe the personal qualities needed to carry on the processes required. Unless the employing official has an adequate conception of the job to be filled, it is impossible for him to obtain a man of just the right capacities.

Sources of Labor Supply.—The most satisfactory source of new labor is the circle of friends of the employees. The old saying "Birds of a feather flock together" is firmly believed in by employment experts. If a certain plant is known as a good place to work, and the employees are contented and have acquired a pride in the concern, this constitutes excellent advertising for new employees. A second source is the union headquarters, if the industry happens to be one in which a strong union organization exists. While many employers do not like to deal directly with the union on employment matters, the practice has the double advantage of quickly and easily obtaining skilled workers and at the same time giving the union a feeling that it is recognized as a factor in the life of the plant. Some concerns use very successfully house-to house canvassing in the immediate neighborhood. This gives an opportunity, if skillfully done, to aid in the building of good will towards the plant in the vicinity where it is located. Public employment bureaus, and the graduates of grammar schools, high schools, and colleges, furnish very satisfactory sources. Advertising in the newspaper is effective in some cases, but most experts on employment believe that this method should be used only as a last resort. The important thing in tapping labor resources is to secure the type that is adapted to the needs of the plant, and

the methods used will be directly dependent on the type of industry under consideration.

The Interview.—The employment office should be located conveniently and should give an appearance of a congenial and homelike place. A worker's first view and impression of a plant is lasting, and the employment department bears a great responsibility for making that impression favorable. The main task of the interviewer is to see that the applicant feels at ease. A minimum of formality should be used by the interviewer so that the applicant will talk frankly about the job he desires to obtain. This means that the interviewer should be a skillful, mature person and not merely a clerk whose conception of his work is the handing out of application blanks and seeing that they are properly filled out and filed. The interviewer should also introduce the worker to the plant and see to it that he is acquainted with its facilities and is established in his work.

Tests.—To sort out applicants and locate them in the right work, there must be some way by which capacity and skill can be estimated. With the developments of modern psychology, various types of test have come into use, designed to give in a few minutes an adequate conception of the workers' native ability and acquired skill. Opinions as to the practicability of these tests are varied. Voluminous evidence could be quoted for and against their utilization. However, all experts agree that much can be accomplished if the tests are given carefully and the results interpreted with due consideration for other pertinent factors.

The simplest form of test is the *performance test,* in which the workman is allowed to demonstrate his ability on the machine which he is going to operate. This method is successful in such cases as the employing of a typist or a comptometer operator. The chief difficulty is that the applicant is under such a severe strain that he cannot demonstrate his best ability, and quite often an excellent employee is lost through his inability to control his nerves during the performance test. *Trade tests* are another widely used type. Under this method the workman is shown pictures of the tools and machines which he claims he knows how to use, and is asked to point out certain parts, name them, and tell their functions. Questions are prepared, the answers to which involve an understanding of the trade This method is used very satisfactorily in machine shops and similar types of work. Third, there are the general *intelligence tests,* such as were used in the army during the two World Wars. The effort here is to try to ascertain the general level of intelligence possessed by the applicant. There is a danger that general intelligence tests will indicate, not intelligence but knowledge, since the lack of a background similar to that on which the test was built will result in poor performance. For example, the use of certain industrial psychological tests worked out in northern universities showed the white soldiers to have a

higher degree of intelligence than the colored, but the answer may be that the colored applicant from the southern plantations was unfamiliar with the very words and articles used in the test, and failure satisfactorily to answer the questions in problems put before him may have been due to lack of knowledge rather than to lack of native intelligence. Finally, we have the *special ability test,* where the worker is tested for some specific characteristic (e.g., steady nerves or keen eyesight) that is a very important factor in the success of the job for which he is applying.

It must be remembered, however, that while tests are useful, there is a danger in too great a reliance on them. After all, a great deal of the success in sizing up a man is dependent upon the examiners' skill at observation. Some individuals have an uncanny ability to size up other persons; others lack this ability entirely.

Promotions, Transfers, and Layoffs. Rating Systems.—A well-developed personnel office assumes partial responsibility for all promotions, transfers to other jobs and layoffs. In each of these cases a definite policy should be established and all employees given a clear understanding of that policy. In recent years the use of so-called rating systems has come into vogue. For example, the United States Civil Service Commission requires periodic rating of all civil service employees. The Service Rating Form requires judgment on: (1) quality of performance, (2) productiveness, and (3) qualifications shown on the job The first group covers thoroughness, dependability, accuracy, neatness of work, skill in handling equipment, cooperation with others. The second group covers productivity, industry, interest in work, speed and promptness in work. The third group covers initiative, ability to work with others, judgment, ability to learn and profit by experience, and similar qualities. The employee's immediate superior *rates* him, and the next higher officer *reviews* the rating Employees receive a report on the final grade and have the right to appeal to the Civil Service Commission.

The fundamental difficulty with all rating systems is that they rest to a considerable degree on personal judgments. Objective ratings on output per man are easy to make, and are accurate; but estimates of initiative, cooperative spirit, and qualities of leadership must be subjective, which makes them open to the prejudice and bias of the rating officer. The issue becomes especially acute where seniority systems exist and where pension systems are in force. The subjective ranking by the rating officer may be vigorously challenged by higher officials and by the employee himself.

The case for rating systems admits these difficulties, but argues that all promotions, transfers, and layoffs necessarily involve opinions of supervising officers, and the democratic, fair way to meet the situation is to require complete reporting of a number of diverse qualities in writing rather than to rely upon an oral, single generalization. Prejudice and bias enter in both

cases, but become more obvious when estimates of many qualities are required. Also, since several men rate each individual periodically, over the years a file accumulates that discloses biases and gives a consensus of many opinions. This is especially important in cases of layoffs, where personal feuds, favoritism, or antiunion sentiment on the part of his superiors may be charged by the employee.

Many enterprises are reluctant to give the personnel office much control of promotions, transfers, and discharges; but there is an increasing tendency in this direction. Rating systems have played a part in the trend because both the mechanism of making the rating and the settlement of disputes over ratings demand a centralized control.

Health and Safety.—With the employment of a new man should go a complete physical examination. Unless a man is in good health he cannot be an efficient worker. Only lately are we learning the important bearing on general efficiency and well-being of such factors as defective teeth, weak lungs, and undernourishment. The modern personnel department maintains a plant hospital and plant dental office, each equipped with trained experts and freely available to the employees of the plant. The introduction of such medical and dental work usually is opposed by the employees and requires very tactful handling to function successfully. Accident prevention and the development of sanitation programs also fall within the province of the director of health and safety.

Education.—No employee should be permitted to take his place until he is properly trained for the work he is supposed to do. One very good method of training new employees is the so-called "vestibule school." Before the new employee is given work in the plant proper he is placed in a training room where he is instructed in the work he is to do. This eliminates the wasteful practice of letting a man pick up the knowledge of his occupation by experience and contacts with fellow workmen. The old apprenticeship system does not operate successfully in large-scale specialized plants and has long ceased to function. Education of the worker, in a broader sense, can be fostered through the development of workers' classes, evening schools, and cooperation with the educational institutions in the vicinity of the plant Adequate training of foremen is a very vital part of the educational program. If the institution has a library or a plant magazine, the supervision of these activities falls within the department's scope

Most industrial plants have been very lax in extending educational facilities. Such work is quite often considered a needless overhead expense, devised by some scientist or critic of industry who knows very little about the technical problems. This attitude is fast giving way to a more progressive belief, that the way to obtain efficiency is to have each man in the organization as well-trained as his capacities permit. A well-trained man is a valuable

asset to the business. Not only does he himself produce a greater output, and perhaps of better quality, but the overhead charge is reduced, since a larger output is obtained from each machine, and the upkeep of the equipment can be maintained with less expenditure of time and money.

Research.—In industrial enterprises operating under scientific management and making use of time and-motion studies, a personnel department should be charged with the duty of making the job analyses required, along with any other technical analyses necessary, such as the study of fatigue. A trained staff is required to do this work, and such a staff can best be administered under the personnel department, for new methods can be introduced effectively only if the cooperation of the men is secured. A hostile attitude of the workers will defeat scientific progress. Studies of labor turnover, absenteeism, the efficiency of individual workers, the efficiency of various production methods, and similar matters, can claim the attention of the research experts.

Employees' Service.—Plants maintaining athletic activities, musical activities, restaurants, and other agencies of employees' service are constantly increasing in number. The chief advantage of this type of work is that it builds up an *esprit de corps* among the workers of the plant. There is always a danger that workmen will misunderstand the purpose of these service activities. Often, as a matter of fact, suspicion is justified; for frequently these activities are established by the management solely for the purpose of reducing unrest in the plant. At a certain plant in a textile district, the opening of a country club in a near-by suburb, with swimming pool, tennis, and general recreational facilities, was very much opposed by the workmen. To-day, if that same company sought to remove the country club, it would probably find a strike on its hands The idea has been completely "sold" to the workers. They help to support the country club, attend it in large numbers, and are very proud to talk about it to their friends outside the plant. The success of the enterprise was the natural result of a sincere purpose on the part of the management to promote friendly relations. Other plants could be found in which years of effort to build up service activities have failed to eliminate hostility on the part of the workmen. The service division must be a cooperative enterprise of the management and the employees. If it is paternalistic in nature, it fails to achieve its purpose

Plant Morale and the Attitude of Labor.—Several times in the foregoing discussion we have called attention to the need for care in maintaining a correct mental attitude on the part of the workmen towards the management. Maintaining the morale in the plant is the most important single function of the personnel administrator and his department If he succeeds in building up cooperation and understanding between the management and the employees, the department's activities will be a success, almost in spite of any other defects its plans may contain. On the other hand, the finest possi-

ble system of employment, health and safety, production, education, research, and employees' service will fail disastrously if hostility, suspicion, and antagonism remain in the worker's mind. The best way to protect the department against the breaking down of morale is to introduce innovations slowly, making sure at each step that the workman understands and sympathizes with what is being done.

There is always a danger that the welfare of labor will be disregarded. Scientific management has for this reason faced the opposition of organized labor. The basic principle of unionism, if one may be permitted to point out one principle, is class consciousness. The workers believe that their lot is a common one, that they stand or fall together; and unity of wage standards is to a great measure their goal The viewpoint of scientific management is just the opposite. It deals directly with each individual worker, endeavoring to make his reward proportionate to his own ability and output. The basic principle in the scientific management of men is to tie up individual effort with individual reward. The unions believe it reduces both the skill of the workmen and their responsibility All methods are dictated by management A long process of education will be necessary before some of these difficulties are ironed out. Success depends largely on the spirit and ability with which management attacks the problem. If business executives are sympathetic and make the transition gradually, always squarely facing the problems of the worker, success will no doubt result Recently organized labor has taken a stand in favor of scientific management, if the rights of workers are at the same time protected Here is an important area of conflict that must be resolved.

Summary

The attainment of abundant production depends partly on the efficiency with which individual business enterprises are managed. By the application of scientific methods to management, first advocated by Frederick W. Taylor, more efficient operation has been realized. Improvement in management is limited, however, by the scarcity of managerial ability, by industrial concentration, by the policies of organized labor, by the size of demands for products, and by such factors as the legal framework of society and the phrases of the business cycle.

A well managed enterprise should be located advantageously with respect to raw materials, power, markets, labor supply, climate, transportation, and the like. Its building should be of modern construction, fireproof, well lighted, and adapted to the work it must do The plant organization should usually be of the line and staff type, which combines the military type, in which a hierarchy of authority descends from the highest executive down to the individual worker, with the functional type, in which a number of

parallel specialized executives direct various phases of the business. The span of control for which each individual is responsible is limited by the knowledge, energy, and personality he possesses. Careful planning of every aspect of the business is the very heart of scientific management.

Each job should be scientifically analyzed to discover the best method of performing it. Workers should be taught this method and their coöperation secured by giving them a share in the savings which result. Wages may be paid by the time or by the piece. The best methods combine these—a bonus above time wages is paid for completing the work assigned in less than the average time. The development of experimentation and research is an essential part of true scientific management.

Increasing attention to the human problems of industry has led to the adoption in progressive plants of personnel departments, headed by personnel administrators. Their function is to increase efficiency by more careful attention to employees' needs and morale. This involves scientific employment of workers, based on job specifications, cultivation of suitable sources of labor supply, and the effective interviewing and testing of applicants. The personnel department must also take care of transfers, promotions, and discharges, and it maintains facilities for health, safety, education, research, recreation, employees' representation, and the like. On the personnel department must fall the burden of maintaining high plant morale and a spirit of coöperation between men and management. The coöperation of organized labor must also be sought.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

All students of scientific management should read the three chief works of Frederick W. Taylor, *Shop Management* (1911); *The Art of Cutting Metals,* presidential address before the American Society of Mechanical Engineers, December 1906; and *Principles of Scientific Management* (1919). General texts of high quality in the field of industrial management are: Richard H. Lansburgh and W. R. Spriegel, *Industrial Management* (1940); C. Canby Balderston, Victor S. Karabasz and Robert P. Brecht, *Management of an Enterprise* (1937); Elmore Petersen and E. G. Plowman, *Business Organization and Management* (1941). The first of these texts made a heavy contribution to this chapter. The last was the basis for our paragraph on "Levels of Management Organization." It contains an extensive bibliography on the entire field of industrial management. For a case study of the introduction of scientific management into one plant see G. B. Babcock, *The Taylor System in Franklin Management* (1918). An interesting, short interpretation is Dale Yoder's, *Labor Economics and Labor Problems* (1933), Chapter XIX. For a vigorous critical analysis of the philosophy of scientific management see J. A. Hobson, *Work and Wealth* (1921), Chapter XIV.

Liberal use was made of *Personnel Administration* (1933), by Messrs. Tead and Metcalf, in writing the original draft of our section on that topic. The best recent general work we believe to be J. E. Walters, *Personnel Relations* (1945). Chapter VII of this book gives a description of several well-developed industrial

rating systems. Mr. Walters also includes an unusually complete bibliography at the end of his volume. Also excellent are *Personnel Management* (1941) by Scott, Clothier, Mathewson and Spriegel; and Dale Yoder, *Personnel Management and Industrial Relations* (1942). The latter work is well done and somewhat broader in scope than the other volumes here listed.

C H A P T E R I I I

Industrial Concentration and the Problem of Monopoly

A. The Scale of Industrial Operations

The Optimum Business Unit.—The size of a business enterprise varies from industry to industry In steel and automobile manufacturing, for instance, giant corporations dominate the field. In agriculture, at the opposite extreme, the typical enterprise is a small, individual farm. The differences are presumably due to the fact that a certain size of business is best adapted to the conditions of a particular industry. Hence, it comes to prevail there. The size and form of business organization which is best adapted to its particular industry at a given time is known as the optimum business unit, or the optimum firm It may be defined as *that organization of business enterprise which, in given circumstances of technology and the market for its product, can produce its goods at the lowest average costs in the long run.*

In any particular industry the optimum business unit will depend upon a balance among a number of factors that make for efficiency or inefficiency in relation to the size of the firm. Mr. E. A. G. Robinson, an English economist, has classified these factors as technical, managerial, financial, marketing, and those having to do with the assumption of risks. All of these factors are closely related to the size of the business establishment. Existing technology may require the use of very heavy plant and complicated, expensive machinery in one industry, or small plants with relatively light and inexpensive equipment in another. The managerial problems may be complex, calling for a large supervisory staff and an expensive organization; or they may be simple, so that they can easily be supervised by one or two executives. The labor operations may be of such a character that they must be carried on by a few very highly skilled men, working mainly on their own initiative; or they may call for large numbers of unskilled men, working at routine tasks under organized supervision by a staff of foremen and other executives. The market may be national or international, and readily served by a few large producing establishments; or it may be local and restricted, calling for scattered small establishments in close contact with consumers.

The Tendency Toward Large-Scale Organization.—In many industries the size of the optimum business unit appears to have been growing steadily

larger over a long period of years. Whereas production was formerly carried on in many small, scattered shops, each employing but a few men and turning out a small quantity of product, today we are accustomed to huge manufacturing establishments, representing the aggregation of great quantities of capital, employing hundreds—in some cases thousands—of men, and with a very large output of goods. This phenomenon is known as large-scale production. It is characteristic of a very wide area of modern industry. The reasons for the spread of large-scale production are to be found in economies which make the optimum unit large in the industries concerned.

While it is probable that all industries will find large-scale production methods advantageous to some extent, the degree of advantage is not equally great in all cases. The industries in which the tendency to large scale is most evident are the following:

(1) Industries handling a very heavy, large product. The iron and steel industry, for example, requires overhead cranes, railways, great furnaces, and similar equipment. The same is true of the manufacture of locomotives, railway cars, and ships.

(2) Industries requiring an elaborate, complex plant, extending over wide territory, such as railroads, gas and electric companies, telephone and telegraph lines.

(3) Industries in which the raw material is of a homogeneous character, thus making it possible for the course of production, from raw material to finished product, to take the form of one uniform and continuous process. This is especially true where the raw material is in the form of a powder or liquid. In the manufacture of paper, for instance, the wood fiber, reduced to liquid form, passes automatically through a sequence of operations, including a series of rollers, and comes out as finished paper. The milling of wheat, and the refining of crude petroleum, are further illustrations of continuous, uniform processes. Very similar to these industries are others using raw materials which, while not perfectly homogeneous, are enough so to apply the continuous technique. Meat packing is such an industry. Every animal is slightly different, but the numerous operations are continuous and uniform for each animal slaughtered.

(4) Closely allied with industries utilizing homogeneous raw materials are those where the assembling of complex mechanisms is an important factor. The production of automobiles, typewriters, and watches illustrates this group of industries. The conveyer belt of the automobile assembly plant has become the symbol of large-scale production throughout the world.

(5) Frequently a natural resource, such as lead or zinc, is found only in limited, localized territory. This renders concentration in a few large establishments very easy, so that the firms in such cases tend to be large.

(6) In many instances the enterprises engaged in the final distribution of commodities to the ultimate consumer obtain economies by virtue of their

great size. The growth of urban department stores, chain stores, and mail-order houses demonstrates this truth. Here the advantages lie primarily in the economies of buying and selling, but the reduction of plant overhead. better utilization of the labor force, and other factors are important.

(7) Finally, industries engaged in risk assumption, such as insurance companies, tend to be large in size, for it is then possible to spread a great number of individual risks over a wide area.

The Survival of the Small Firm.—In spite of the advantages of large-scale processes, there are a number of factors which tend to limit the extent to which plant and equipment can be economically expanded.

Technical factors cause the size of the optimum firm to be rather small in many industries. The loss of efficiency which would result from expanding the plant beyond a certain size makes it more profitable to duplicate rather than enlarge the producing unit. Agriculture appears to be such an industry. Here, large-scale methods can be introduced only by increasing the acreage under cultivation. Moreover, the entire agricultural process lacks the uniformity and routine essential to the development of the division of labor and standardization. The textile industry is another industry in which the technical optimum is small. Only up to a certain point does the expansion of scale yield greater economies. Thus, textile machinery tends to be used in relatively small units, and factories are duplicated rather than enlarged.

Standardization often tends to decentralize an industry almost as much as it tends to concentrate it. For example, the standardization of automobile parts made it possible for the small producer to specialize in the manufacture of small parts, often producing with lower costs than the major plants engaged in automobile production.

The development of very large firms has also been limited somewhat by the management factor. An excessively large firm is unwieldy, and difficult to supervise and coördinate.

The size of a firm's market is another factor which tends to limit its size. Clearly, a concern which produces a specialty for which there is a very small demand can scarcely become very large. Similarly, an industry whose products cannot be readily transported will tend to supply a restricted market. However, as transportation improves, and new methods of shipping evolve, markets are widened, and the size of firms in the industry affected tends to increase correspondingly.

In addition to the technical factors which conduce to the development of relatively small firms, there is at least one other factor which has led to the survival of the small establishment—the desire of many individuals to become their own "bosses." Often this desire is so intense that the small enterpriser is a hard man to dislodge, even in certain industries in which technical factors make the optimum size large.

Similar to this factor is the matter of convenience to customers. A location near to the homes of buyers, and the personal relation between the small shopkeeper and his patrons, enable small retail stores to survive in spite of competition from chain, department, and mail-order establishments.

Industrial Integration.—Firms may grow larger in size by expanding from within, while retaining their separate, independent existence. This is large-scale production without combination of competing enterprises. But the trend toward increasing the size of the business unit often takes the form of a union of several formerly independent firms under centralized ownership or management. This process of combining several firms into one larger unit is called integration or combination. It may or may not be accompanied by changes in the operation of the plants as technical producing units. Each may continue in operation on the same scale as before, or one or more of them may be abandoned in order to concentrate the production in a smaller number of more efficient establishments; but the significant point is that they no longer compete with each other, because they are centrally controlled.

Horizontal, Vertical, and Lateral Integration.—There are three different types of integration, the first of which is called horizontal. *Horizontal integration* is the combining of numerous establishments all operating in the same stage, or level, of production. A very common example is the chain store. The Great Atlantic and Pacific Tea Company has hundreds of stores retailing food products throughout the United States. The old whiskey combination was primarily an integration of distilleries, and the sugar combination an integration of refineries. The control of a stage of production, if reasonably complete, gives enough economic power to establish a monopoly; hence, our early "trusts" usually assumed the horizontal type of organization. But there are many legitimate economies to be gained. Wastes of competition are avoided, better standardization of products is possible, cross freight shipping can be reduced, demand and supply can be more easily balanced, thereby reducing costly, irregular production, and finally, buying and selling can both be more efficiently handled.

Where several or all of the stages of production are placed under a single organization, it is known as *vertical integration*. This type of integration frequently tends to develop out of horizontal integration by reaching backward to control sources of materials and forward to control outlets to consumers. Rubber manufacturing companies may own their own plantations; paper mills frequently produce their own paper pulp; printing firms may own paper mills; large tobacco companies may own their own retail outlets. The iron and steel industry is the best example of vertical integration. The United States Steel Corporation has its own iron and coal mines, blast furnaces, steel mills, fabricating plants, and even its own railroads. All such vertical integrations enjoy in large measure the economies that are open to

horizontal combinations, and in addition they reduce the costs of middlemen and they coördinate the successive stages of production.

The term *lateral integration* has been used to denote the branching out of a business into various side lines by the absorption of other firms whose products are more or less loosely associated with the main activity of the parent company. It can also be called complex integration.

This type of integration may evolve out of the development of by-products, as in the case of the chemical industry. For instance, the famous Du Pont Company has spread out laterally over a very wide field from an early start as producers of explosives. The manufacture of these explosives involves the production of certain cellulose compounds that are also basic to many other important products, including rayon, artificial leather, and plastics. Hence, there began a general chemical industry which today includes dyes, paints, toilet articles, artificial leather, rayon, nylon, cellophane, plastics, synthetic rubber, and a host of others. The company has also bought large stockholdings in other enterprises that buy its products, the most outstanding example being in General Motors Corporation, much of whose stock is owned by the Du Pont organization. Sometimes a company, in absorbing a firm producing one of its raw materials or parts, may acquire with it a side line having very little connection with its own product. This happened, for instance, when General Motors Corporation purchased the Delco Company. The latter was a large producer of automobile electrical equipment, but it also manufactured one of the most widely used systems for farm lighting. An automobile manufacturing corporation thus found itself in the business of supplying farm-lighting equipment.

It is not uncommon, however, for large firms to spread out in divers directions that cannot be explained in terms of by-products or the absorption of related side lines. The meat-packing industry in the United States is a striking case of almost every conceivable kind of expansion. The four big packers—Armour, Cudahy, Swift, and Wilson—own and control railroads, high-speed electric lines, land development companies, printing houses, rendering plants, cotton oil companies, newspapers, magazines, railway terminal facilities, banks, packers' machinery companies, cold storage plants, warehouses, canning companies, and slaughtering companies. The actual products produced by these four packers, as listed by the Federal Trade Commission in 1919, numbered over six hundred,[1] and this did not include the products of the subsidiary and allied companies. Commodities in the list ranged all the way from bearings for railroad cars to condensed milk.

Where the products combined in a lateral integration have a fairly close relationship with each other, all the advantages of both horizontal and verti-

[1] *Report of the Federal Trade Commission on the Meat-packing Industry.* Summary in Part I (June 24, 1919). See especially the chart opposite p. 46.

cal integration are derived In addition, there is a better coordination throughout the associated industries. The movement of raw materials to factories, of finished goods from factories to marketing outlets, and the handling of by-products, are closely tuned to each other by virtue of unified management. But, where the different lines of activity combined have no natural relationship, it is doubtful if there is any substantial gain. In this case, such integration represents a sort of economic freak, resulting from overzealousness or desire for power on the part of its promoters.

Integration in Relation to Optimum Size.—An important issue of social policy is raised by the question whether the movement toward integration is a response to natural forces making for an optimum organization of industry, or whether it is merely a manifestation of a struggle for power and monopoly privileges on the part of business men. We have seen that not all the influences that determine the size of the optimum business unit work in the direction of large-scale enterprises Some work one way and some another. The enterpriser must strive to form the type of organization that will achieve the best balance of all the factors in each individual case. Nevertheless, it is apparent that on the whole, the pressure of optimum influences works in the direction of larger business units Integration is one way of working out this tendency and, furthermore, it is often a means by which the conflicting factors relating to size may be reconciled. The chain store, for instance, combines the advantages of a small retail marketing unit with those of large-scale purchasing, financing, packaging, and management

However, integrations have not always been successful. Many of them have not effected a reduction in the costs of production, and not a few of them have been business failures One reason for this probably is a scarcity of managerial ability. To handle the affairs of a very large organization efficiently calls for qualities possessed by few persons. There are not many Rockefellers or Fords Hence, it is possible for an enterprise to grow beyond the capacity of its managers to direct it efficiently. Failure may be the penalty for this mistake. It must be said also that the promoters of industrial combinations are not always actuated by the desire to reduce costs through a more efficient organization. Rather, they are seeking to make quick profits from promoting the mushroom growth of a corporate consolidation or to increase business profits by eliminating competition, and thus, freed from forces that would ordinarily hold their prices down to a reasonable level, exact exorbitant prices from consumers. Sometimes it is sheer love of power that leads men to build up giant enterprises.

There are some cases where the optimum unit in a given industry is so large that there may be room for only one such organization in a particular market. In such a case, the industry tends naturally toward monopoly. In the majority of cases, however, the market is large enough to make room for several optimum firms; and in some industries, the optimum unit is so

small in relation to its market that many competing enterprises are likely to prevail. The social interest demands that the optimum form shall prevail in each case, and social policy should be framed with this end in view.

B. The Decline of Competition and the Rise of Monopoly

Degrees of Monopoly and Competition.—We must not suppose that industries can be divided sharply into two broad categories of monopoly and competition, for the one shades off into the other without a sharp dividing line. Four general types of situation are recognized by economists, as follows: (1) *pure monopoly*—where there is only one seller of a certain good; (2) *oligopoly*—where there are only a few sellers of a given good; (3) *product differentiation*—where several or many sellers offer goods which are similar, but not quite identical; (4) *pure competition*—where there are a great many sellers of identically the same good.

It will be seen from this that a pure monopoly exists only when the entire supply of a given good is in the control of a single seller, or a group of sellers acting in close agreement. Monopolies are seldom so complete; and even where they do exist, there is usually competition from substitute products. For instance, a pure monopoly of coal would have to compete with the producers of fuel oil, gas, and water power; and if all automobile factories were owned by one concern, it would have to reckon with such other means of transportation as railways, airplanes, and even horse-drawn vehicles and bicycles.

On the other hand, an element of monopoly may be present where there is more than one independent seller if the number competing is quite small (oligopoly). In some industries the size of the optimum plant is so large in relation to the market that there is not room for many concerns. This is clearly true for locomotives. In the manufacture of steel rails, gasoline, and raw copper a few large producers dominate. Where such a situation of oligopoly prevails, the several sellers realize that they have more to gain by a policy of "live and let live" than by competing too actively with each other. Hence, their behavior will tend toward monopolistic practices.

Even where the number of sellers is large enough to generate keen competition, there may be certain producers who enjoy preferred positions because of some real or claimed advantages which distinguish their product from that of their rivals (product differentiation). There may be a patented feature (e.g., the noiseless typewriter), a well-established brand (e.g., the name Kodak), or a superiority in design. Such cases give a special control over the market, and when combined with oligopoly, the monopolistic element may be very strong.

Pure competition exists when there are a great many sellers whose products are all identical and no one seller controls a large enough part of the

total output to exert an appreciable influence on price. If a seller controls a large enough part of the supply to affect the price by withholding or increasing his offerings, then some element of monopoly is present; there has been some decline in the degree of competition. In purely competitive markets, such as those of the grains (wheat, oats, rye, and so on), the seller must take the market price as he finds it. Pure competition now prevails in very few industries. It is characteristic of agriculture, but even here government intervention virtually unites farmers in a policy of monopolistic agreement.

For our present purpose it is sufficient to use the term monopoly broadly, to cover all those cases where there is a substantial measure of centralized control in an industry.

The Growth and Extent of Industrial Concentration.—It has been estimated that the 594 largest corporations in the United States in 1933 owned about 53 per cent of the total assets of all those corporations which made income tax reports in that year.[2] The 211,586 smallest companies, although they comprised more than half the total number of corporations reporting, owned only 1.4 per cent of the total assets. More dramatic, perhaps, is the estimate of Messrs. Berle and Means that in 1930 the 200 largest corporations in America (each with assets of more than $90,000,000) controlled 49.2 per cent of all nonbanking corporate wealth, 38 per cent of all the wealth invested in business (both corporate and noncorporate), and 22 per cent of the wealth of the entire nation.[3] It is needless to add that this concentration gave to those in control of the 200 corporations a considerable degree of monopolistic power.

It is possible to divide the industries of this country roughly into two broad classes with respect to the degree of concentration that prevails in them. In the first group we may place those industries which are characterized by a great many small enterprises, and in which, consequently, active competition is the rule. This group will include agriculture, wholesale and retail trade, personal service, building construction, and a miscellany of smaller businesses. Altogether there are about 10,500,000 business units in these industries. The second group consists of those industries which are characterized by a relatively small number of large firms and in which, consequently, there is a considerable degree of concentration and monopoly. It will include transportation, public utilities, manufacturing, mining, and finance. There are less than 500,000 firms in this group, but they produce more than 45 per cent of our total national product.[4] In many industries of this last group there is clearly a condition of oligopoly. For instance,

[2] Alfred L. Bernheim, Ed., *Big Business Its Growth and Its Place* (1937), p. 5.

[3] A. A. Berle and G. C. Means, *The Modern Corporation and Private Property* (1932), p. 32.

[4] Clair Wilcox, *Competition and Monopoly in American Industry*, Temporary National Economic Committee Monograph No. 21 (1940).

according to the census of manufactures, there were in this country in 1937 only three linoleum factories, twelve locomotive building establishments, twenty-five smoking pipe factories, thirty-four cigarette factories, thirty-eight piano factories, fifty-five wool carpet and rug mills, and a long list of other industries in each of which the number of establishments did not exceed one hundred.

Conditions Favoring Concentration.—Why have business enterprises moved on from justifiably large-scale organizations to the more questionable stage of monopolistic or semimonopolistic combinations?

(1) Sometimes monopoly arises because important *resources are localized by nature* in a few regions which can readily be brought under unified control. Most diamonds are found in the mines that lie within a comparatively small area in South Africa. It was easy for one corporation to get possession of these mines and thereby effect a monopoly of the world's diamond supply. Similar conditions apply to a considerable number of rare elements and raw materials, such as helium and radium.

(2) In many industries, the size of the optimum plant is so large in relation to the market for the product that there is not room for more than a very few such plants in the industry. Here the monopoly may be attributed to the *economies of large-scale production*. In such cases, the large plant has so great an advantage over its rivals that it can undersell them and gradually absorb their business. This is the principle that brought about the concentration of the meat-packing business into the hands of the so-called "Big Four" concerns, and this principle, coupled with a natural limitation of the supply of resources, helped create such monopolies, or partial monopolies, as those of the United States Steel Corporation, and the Standard Oil Company of John D. Rockefeller's day.

(3) A third type of monopoly may be due simply to the *control of a huge amount of capital* by a single corporation or combination. Where the resources of an organization are sufficiently large, even if there is no natural limitation of supply and no tendency to decreasing costs, its financial power may be great enough to destroy its competitors, for it can afford to sell its products at a loss until they are driven from the market. Then the big corporation, now alone in the field, can raise its prices enough to recoup its losses and enjoy excessive profits. Monopolies of this sort must depend upon cut-throat competition, and often unfair methods, to maintain their position.

(4) Monopolies may be based upon *secret processes*. Where an important product is manufactured by methods known only to one individual or group, and there is no other known way of producing it, the lucky possessor of the secret can use his power to monopolize the industry. The drug Argyrol, widely used in the treatment of diseases of the throat, nose, and eyes, is controlled by a single individual (its discoverer) who alone knows

its secret, and who has exploited his product to reap a fortune. Other examples of this kind of monopoly can be found, but they are not numerous.

(5) Monopolies may also arise out of *patents and copyrights*. When the government, by a patent, grants the exclusive right to the use of a new discovery for a period of years, it creates a legal monopoly of the patented device or process. Although such monopolies are of limited duration, they are frequently extended for longer periods by further patents on successful improvements. Meanwhile, a corporation which controls the patents may grow so strong that its position of dominance is secure long after the original grant has expired. The United States Shoe Machinery Corporation held a monopolistic grip on the shoe manufacturing industry for many years by virtue of its control of basic shoe machinery patents. The General Electric Company at one time controlled the manufacture of 95 per cent of the incandescent lamps in this country by means of its patents. Among other large concerns that dominate their respective industries through their control of patent rights may be mentioned the Singer Sewing Machine Company, The Aluminum Corporation of America, The American Can Company, The American Tobacco Company, and the National Cash Register Company. Where a number of concerns control important patents in a given industry, they sometimes make pooling agrements by which all those who are parties to the agreement may share each other's patents. In this way, control over the entire industry is concentrated into the hands of those who are members of the pool.

(6) Governmental bodies, such as municipalities, sometimes create monopolies by granting *exclusive franchises* to particular corporations for the building of street railway lines, the erection of electric wires, or the laying of gas and water mains, on the principle that the most efficient service to the public is to be obtained by unified management. Governments are in a position to create these monopolies because a private company cannot tear up the streets to lay tracks or pipe lines, nor erect its poles upon the public highways, without the permission of state or local authorities. Franchises are usually local, but if several franchise-holding companies are consolidated, a monopoly may be created covering a very wide area. In 1932 ten great combinations controlled approximately three-fourths of the entire electric light and power business in this country, and sixteen combinations controlled 45 per cent of the gas business.[5] We shall give special attention to this type of monopoly and to government regulation of it in Chapter V.

(7) In a few cases there are *governmental monopolies* operated by the state itself. Illustrations of this are the post office, the coining and printing of money, and the providing of streets and highways. In some countries the state operates monopolies of certain commodities (particularly salt and

[5] J. C. Bonbright and G. C. Means. *The Holding Company* (1932), p. 91.

tobacco) as a source of public revenue. The number of governmental monopolies has been increasing in recent decades; it constitutes a development of some importance that will engage our attention more fully also in Chapter V.

Forms of Monopolistic Combination.—There are various forms of organization which monopolistic combinations can take to secure control of an industry. One of the earliest of these was the *pool,* which flourished in this country during the era of industrial expansion that followed the Civil War. A pool consists of an agreement among several independent companies to divide the business between them in some predetermined manner. In some cases the profits of all are placed in a general fund, from which each draws its agreed percentage; in other cases, each is given a certain quota of the total output to be produced; or, each may be given a particular geographical region for its exclusive exploitation. In one of these ways competition among the several firms is effectively eliminated, and it becomes possible to maintain prices high enough to yield monopoly profits for all of them. Pooling agreements were widely used among railroads in the United States at one time; but they were abolished by the Interstate Commerce Act of 1887. Somewhat later the patent pools described in an earlier paragraph were developed.

Pooling agreements are a weak form of organization because they are not legally enforcible. The courts in this country early held them to be contrary to public interest; hence, if some members of a pool decided to break away from it in order to expand their business, the others had no legal remedy. Nevertheless, some of the early pools were very successful. A pool maintained high prices for steel rails almost continuously from 1887 to 1896, and the Continental Wallpaper Company pool as late as 1888 controlled about 98 per cent of the manufacture of wallpaper in this country. Monopolistic pooling agreements are now illegal in this country under our antitrust laws, but similar arrangements, in the form of cartels (to be described), are legal in some parts of the world, and American combinations have sometimes secretly participated in them.

The *trusteeship* is another form of combination that was once widely used in this country. In this form, the majority of stockholders in the various companies entering into the combination turned over their stock to a board of trustees, which was empowered to act for them. In return the stockholders received trust certificates which entitled them to shares in the profits of the combination. This placed the control of the industry in the hands of a small group of men, the trustees, who by holding a majority of the stock in the several corporations, possessed the power necessary to operate them as a unit. An advantage of this form of combination was that the trust was not an incorporated body, but was simply a private organization formed by extending the common law trust principle to business enterprise. For a time

this type of combination flourished, especially in the case of the Standard Oil Company, where six or seven men built up an organization that carried the American oil industry in the palm of its hand for several decades. Other trusts were formed in the cotton, oil, whiskey, sugar refining, lead, and other industries. The ruthless use of monopolistic power by these trusts led to public outcry and legal prosecutions. As a result, the courts outlawed the device, and it is no longer used as a means of effecting combinations, although it has certain other uses.[6] However, the public has become so used to calling monopolies *trusts,* that they are still so called to this day. We, too, shall use the word in this broad sense, employing the more precise expression *trusteeship* to denote the trustee form of combination.

In a search for some legal form of combination to replace the pool and the trustee device, the lawyers for big business interests turned to the *holding company.* Such a company controls a number of subsidiary corporations by owning a majority of their stock. The organization resembles that of the trustee device, the board of directors of the holding company taking the place of the board of trustees. However, the holding company secures a charter from a state, which gives it legal validity, although it may be subject to prosecution under the federal antitrust laws if it uses its power to restrain competition unreasonably in industry. There are many large holding companies in this country which are in a monopoly position because of their power to dictate the policies of the subsidiary corporations which they control.

During the last few decades, many new combinations have been effected by the growth of giant *supercorporations* which absorb formerly independent companies, either by merger or by purchase. In the case of a merger, a number of companies join themselves into one; each gives up its own charter and loses its identity, the stockholders receiving shares in the new larger corporation which thus comes into being. In other cases, the parent company buys up the smaller companies in their entirety—lock, stock, and barrel. By either of these methods, a permanent and effective combination is established. Frequently the supercorporation is at the same time a holding company which, in addition to absorbing a number of smaller enterprises, purchases a controlling interest in other corporations that retain their separate existence. The United States Steel Corporation (the giant of our iron and steel industry) is a mixed supercorporation, and so is the General Motors Corporation which makes a number of well-known automobiles and other products.

A common type of combination in Europe is known as the *cartel.* The term is a broad one, including almost any kind of monopolistic agreement among otherwise independent producers in a given industry. The agreements may be concerned with the division of territories for exclusive exploitation by the several concerns, the setting of production quotas, the fixing of prices, the sharing of patents, and other matters of similar nature. It will

[6] See the discussion of the *voting trust* on p. 99.

be recognized that the cartels are thus pooling arrangements, for the most part. Their general effect is to restrain competition, limit production, and maintain relatively high prices.

Some Looser Forms of Combination.—In the preceding forms of combination the control of the various members by some central organization is formal and complete. There are a number of looser forms in which a considerable measure of concerted action is secured without structural centralization or formal loss of independence by the various concerns involved. Arrangements of this kind have become especially prevalent in recent years Because of their informal character, these combinations are often difficult to detect. They vary widely in type. Perhaps the most important kinds are informal agreements, interlocking directorates, marketing cooperatives, and trade associations

Informal agreements consist of tacit understandings or "gentlemen's agreements" among leading businessmen in this or that branch of industry, to the effect that they will not cut prices but will pursue a policy of "live and let live" under which all can prosper In the days when Judge Gary was a notable figure in the steel industry, he used to invite other leaders in the steel business to elaborate dinners at which a spirit of cooperation was engendered and problems of the industry were discussed. Although no written agreements were reached, it was observed that competition in the steel industry was very much reduced by the understandings there arrived at, and the dinners became famous as examples of what this type of informal action can accomplish

Interlocking directorates exist where a number of influential people occupy positions on the boards of directors of two or more supposedly separate corporations. Though the corporations have no formal agreement with each other, the influence of the common directors may nevertheless be sufficient to reduce competition and secure effective cooperation between them. A system of interlocking directorates may become extremely involved. A Senate investigation in 1933 disclosed that J P. Morgan & Company, together with Drexel & Company and other affiliates, held 126 directorships or trusts in 89 different corporations with total capitalizations of more than $20,000,000,000. The device of interlocking directorates is not necessarily illegal or anti-social, but it becomes so under existing laws if it is used to restrain trade. However, such use of it may be very difficult to prove.

Marketing cooperatives have been most developed in the field of agriculture. They consist of organizations of farmers to sell their produce through a central agency. The details of their organization will be developed in the chapter on marketing; we are here concerned only with their monopolistic aspects The cooperatives are presumably created to solve marketing problems of small farmers who cannot be expected to be marketing specialists. Each member of the cooperative agrees to market his output through the

central office, or if he fails to do so, to pay a penalty for each unit of output sold independently While the cooperatives do not openly control the output of their members, it has been charged that they do so indirectly to some extent. It is likely that they will do more of this in the future because recent federal legislation has increased their powers in this direction [7]

A *trade association* is an organization of businessmen in a given branch of industry to promote their common interests without encroaching on their individual prerogatives as free enterprisers, and, ostensibly, without reducing competition among them Sometimes they are called institutes. Typical examples are the Paint Manufacturers' Protective Association, the Hardwood Lumber Manufacturers' Association, the Maple Flooring Manufacturers' Association, the National Canners' Association, the American Iron & Steel Institute, the Cotton Textile Institute, the Sugar Institute, and the Wool Institute. Undoubtedly, these associations can perform many useful services among competing enterprises They can facilitate the exchange of trade knowledge, especially through the publication of trade journals. They can operate central research bureaus with laboratory facilities for experimental work that would be beyond the means of small individual producers They can carry on national advertising campaigns to promote the sale of the products of the industry. They can disseminate information concerning the trends of prices, volume of sales and of production, stocks of goods on hand, and similar information which enables each businessman better to adjust his program to the current and prospective situation in his industry. Many trade associations have done good work toward developing higher ethical standards in their respective branches of production. They also promote legislation useful to the industry and help protect the industry against discriminatory taxes or unfair laws However, many of their policies tend to restrict competition and to promote monopolistic practices. The dissemination of information concerning production, stocks of goods on hand, and so on, leads rather easily toward policies of output restriction, formal or informal. Many of the associations have "open price" rules, requiring their members to make known to each other the prices at which they are selling their products. This immediately gives notice to other concerns if any member of the association begins to cut prices below established figures, and puts his competitors in a position to bring pressure upon him to abandon his policy of price cutting. The result is likely to be a considerable reduction of price competition. Moreover, since many trade associations are dominated by a few large producers, the latter are in a position to adopt punitive tactics against recalcitrant members who do not follow policies which they consider good for the industry.

This dominance of certain industries by one or two large concerns fre-

[7] For further discussion of this problem, see Chapter VI

quently leads to a situation known as *price leadership*. This is most likely to arise where the number of firms is few (oligopoly) and most of them are of relatively small size in comparison with the dominating firm or firms. The latter have so large a share of the market and such great financial resources that they could easily crush their smaller competitors if they so desired. However, they find it better policy to permit the smaller firms to survive so long as they are willing to follow the leader, for this preserves the appearance of competition in the industry, and is less likely to bring the dominating concerns afoul of the antitrust laws. The leaders set the prices for the products of the industry at figures high enough to allow good profits for all, and the smaller concerns adopt these prices, knowing that if they begin a price-cutting campaign their larger rivals will destroy them.

International Combinations.—The growth of monopolistic combinations does not always stop at national boundary lines. International combinations which dominate large sections of the world markets for certain commodities have become increasingly prevalent. Sometimes these organizations arise out of the desire of various national monopolies to protect their position within their own countries. By forming an international cartel, each is given the exclusive right to exploit its own market without invasion from the others. In other cases, international combinations have been effected to eliminate price cutting in exploiting rich foreign markets (for example, in South America or the Orient), or to secure the interchange of patent rights and production methods. Organizations of this kind have been most conspicuous in the coal, metals, chemicals, textiles, paper, and electrical goods industries. When the United States entered the Second World War, it was discovered that certain American firms were parties to international agreements which gave them a monopoly of the United States market for such important commodities as optical goods, tungsten, beryllium, and magnesium, but which left foreign markets to the Germans. The growth of these industrial giants that boldly parcel out the markets of the world among themselves, shows convincingly that the modern economy has moved a long way from the institutions of free enterprise and competition that formerly characterized it.

The Abuses of Monopoly.—The more serious evils of monopolies are: (1) abuse of investors by questionable methods of promoting monopolistic combinations; (2) abuse of consumers by exacting exorbitant prices; (3) abuse of other businessmen by using unfair methods of competition; and (4) the not infrequent corrupting of public authorities.

(1) The promotion of many of our trusts has been accompanied by scandalous financial jugglery. In the expectation that monopoly power would lead to rich profits, promoters painted alluring pictures which induced independent business men and investors to come into the combinations without scrutinizing very closely what the prospects for the new ventures really were.

The parent corporations were capitalized at figures far in excess of the values of the properties they acquired, and the promoters took very generous shares for themselves. We shall learn in the next chapter how promoters in such cases can enrich themselves at the expense of their stockholders. There has been much of this kind of chicanery in the building up of industrial combinations.

(2) We have several times referred to the fact that monopolies often charge high prices for their products. In fact, the possibility of exacting such prices is one of the main reasons why they are created. When a single organization controls the entire output of a given product, it can fix whatever prices it finds expedient; the consuming public must pay that price or go without. This does not mean that there is no limit to monopoly prices. We have already seen that consumers may switch to some substitute product if prices are too high. Also, the monopoly may not be complete; there may be an oligopoly in which some of the producers may be tempted to expand their business at the expense of their rivals if they feel that prices have been boosted to a point where price cutting would be to their advantage. Even if there is only one concern, it may be restrained by the fear of inviting competition or of provoking governmental intervention if it exploits its position too ruthlessly. Furthermore, every monopolist has to reckon with the fact that the higher he raises his price, the less of his commodity consumers will buy. It may be better to get a moderate profit per unit on a large volume of sales than a large profit per unit on a smaller volume. All these considerations have some restraining effect upon monopoly prices. Nevertheless, prices under monopolistic conditions are likely to be somewhat higher than would prevail for the same commodities under conditions of competition, and there have been many cases where the creation of a monopoly was shortly followed by sharp increases in the price of its products. The consuming public is thus exploited so that the monopolists can enjoy unreasonable profits.

(3) In attaining and holding their monopoly position, combinations frequently resort to unfair methods of competition which injure other businessmen. Such unfair competition takes many forms. Trusts frequently fix different prices for the same product in different localities for the purpose of driving local business firms out of existence. The price is kept below costs in those communities where competitors are found. The latter must meet these prices or lose their customers; but they cannot long endure their losses, so they are driven out of business. The trust offsets its loss by charging high prices in other communities where competition is slight or non-existent. This practice was followed extensively by the Standard Oil Company in the days of its greatest power. Powerful trusts have also succeeded in forcing railroads to grant them lower freight rates than were charged their competitors, by threatening not to patronize a given railroad

if it failed to comply. The railroad, not wishing to lose the large business of the big firm, would return part of its freight charges in the form of a rebate, thus enabling the trust to undersell other competitors because of its lower freight cost. The Standard Oil Company used this weapon extensively in the heyday of its power. Railroad rebates have since been prohibited by law. Another practice consists of exclusive contracts by which dealers who handle the products of the trust agree not to sell the products of competing concerns. Since the latter are usually smaller in size and do not produce a full line of products, the dealer is forced by this means to handle the products of the trust alone, or carry an incomplete line of goods. This "full-line forcing" was at one time the customary practice of the International Harvester Company in doing business with local dealers in farm machinery. The officials of big business firms have not even hesitated to stoop to the employment of spies in their competitors' plants in order to ferret out their trade secrets, and sometimes they deliberately intimidate their competitors to make them comply with trust domination. Employees have been bribed, dealers and salesmen have been threatened, and even criminal violence has been resorted to in some cases. Finally, the use of "fighting brands" has been quite common, especially in the tobacco industry. In this device the big concerns put out inferior products closely imitating in name, color, package, and other characteristics the most popular brands of their competitors—the imitations being sold at very low prices. These "knockers" tend to discredit the competitors' goods. They are usually removed from the market after they have served their purpose of eliminating competition.

(4) Political corruption grows out of the attempt of big business to stave off government regulation, and to gain special favors, such as high import duties to protect American business from foreign competition. The maintenance of strong party organizations, which are necessary for the nomination of candidates under our form of government, requires the expenditure of large sums of money which must be derived in considerable measure from wealthy contributors; hence, candidates, once elected, feel under some obligation to their financial backers, and they tend to follow policies which will satisfy the wishes of the latter rather than the interests of the voters at large. Large corporations have discovered that the making of heavy contributions to political parties gives them a lever of control over the candidates whom they have helped to put in office. So a pernicious influence comes to pervade politics, and this danger becomes increasingly acute as the expense of public elections mounts and combinations grow in size and power.

C. The Control of Monopolies

From Noninterference to Positive Measures of Control.—In the early part of the nineteenth century, when capitalism was in its infancy, it was

assumed that competition would be active throughout all industry, and that such competition would be a sufficient protection against exploitation of one economic group by another. Investors would get the highest possible interest or dividends because enterprisers would bid against one another for their savings; consumers would be protected against extortion because producers would seek their patronage by offering the best goods they could produce at the lowest possible prices; business success would result only from efficiency in production, and only those who were inefficient would be worsted in the competitive struggle. Hence, it was not considered necessary for government to interfere in the conduct of business operations, and a policy of *laissez faire,* or noninterference, was generally followed.

However, in the course of a few decades it became apparent that things were not working out in accordance with the theory of competition. Abuses of the sort described above began to make their appearance, and gradually they became more serious. Belief in the effectiveness of competition as the all-sufficient regulator of industry declined, and public opinion swung toward the view that government regulation was necessary. In the latter part of the century the pressure for corrective legislation had become so strong that a number of states had adopted regulatory legislation of one kind or another, and soon the federal government took matters into its hands by passing two famous laws—the Interstate Commerce Act of 1887 (which was concerned mainly with transportation) and the Sherman Antitrust Act of 1890 (which dealt with the problem of monopoly more generally).

Our policy since that time has drawn a rather sharp distinction between two groups of industries One group consists of those industries which are known as public utilities. These include railroads, street railways, telephones and telegraphs, electric light and power, gas works, water systems, and certain others. It has been the accepted view that the public interest in these cases is best served by permitting the existence of monopolies. Hence, the policy has been to control them, either by strict regulation or by government ownership. The other group comprises most other branches of industry, especially manufactures. It is to monopolies in this second group that the term *trusts* is most commonly applied. Here our policy has been mainly one of suppression, in an effort to enforce the maintenance of competition, except for a brief period in the great depression of the early 1930's. The remainder of this chapter will be devoted to an account of our experience in connection with this second group. We shall deal with the regulation of public utilities in Chapter V.

The Sherman Antitrust Act.—The Sherman Antitrust Act, which was passed by Congress in 1890, remains to this day the cornerstone of our policy toward industrial combinations outside of the public utilities field. Section 1 of this act provides that "every contract, combination in the form of trust or

otherwise, or conspiracy in restraint of trade or commerce among the several states, or with foreign nations, is hereby declared to be illegal; every person who shall make any such contract or engage in any such combination or conspiracy shall be deemed guilty of a misdemeanor, and on conviction therefor shall be punished by fine not exceeding $5,000 or by imprisonment not exceeding one year, or by both said punishments in the discretion of the court." The law further provides that the word *person* shall be construed to include corporations and associations, and that persons injured by a trust can sue it for triple damages, plus the costs of suit.

At first this statute was ineffective, largely because the courts construed it narrowly and showed little sympathy with its purpose. Beginning in 1899, however, the United States Supreme Court, in a series of important decisions, upheld the power of the government to break up monopolies under this law, and defined the scope of that power. In that year it sustained the government in its effort to break up a pool of steel pipe producers operating under the name of the Addyston Pipe and Steel Company, which had divided the United States into districts which were allotted to its various members as exclusive markets for their exploitation. In 1904 the Court held that the law was also applicable to a holding company (the Northern Securities Company), which had brought about elimination of competition between two railroads. The law was further clarified in 1911 by the famous "rule of reason," when the Court made a distinction between reasonable and unreasonable restraint of trade. It held that the intent of Congress was merely to prohibit unreasonable restraints.

The Standard Oil Company, which was a notorious monopoly built up by John D. Rockefeller in the later nineteenth century, and which had used ruthless methods in attaining its position of power, was held at this time to be guilty of unreasonable restraint and was forced to dissolve. The same action was taken in the case of the American Tobacco Company, a supercorporation which had attained a monopolistic hold on the tobacco industry. But in 1920, when the United States Steel Corporation was prosecuted, the court held by the same rule that mere size was not necessarily an indication of unreasonable restraint, and since the use of abusive practices by the corporation in this instance was not proved, the corporation was not in violation of the law. As a result of these various cases, it was made clear that the Sherman law could be used to reach any form of monopoly, whether a pool, trusteeship, holding company, or supercorporation, if it indulged in such practices as fixing prices or limiting production, but that large combinations could not be subject to prosecution so long as their conduct was not abusive of the public interest.

The Clayton Act.—Notwithstanding these decisions, in the twenty-odd years that followed the passage of the Sherman law, experience with it indicated that some of its provisions needed further clarification, while others

needed to be strengthened. These changes were embodied in the Clayton Act of 1914. This law was a combination of several bills dealing with different phases of the trust problem, combined merely for convenience. It prohibited local price discrimination and the making of exclusive contracts or leases, and it declared holding companies and interlocking directorates to be illegal if their effect was to restrict competition or to create monopoly. To strengthen the enforcement of the Sherman law, it provided that violation of that law by a corporation was to be construed as a violation by the directors, officers, or agents responsible therefor, and such individuals were to be subject to its penal provisions. Enforcement of antitrust legislation was placed in the hands of the Federal Trade Commission for most combinations, but in the hands of the Interstate Commerce Commission for common carriers, and in the hands of the Federal Reserve Board for financial institutions. The act also contained several provisions relating to labor organizations which need not concern us here, except to note that these organizations were not to be construed as a violation of the antitrust laws.

The Federal Trade Commission.—At the same time that the Clayton Act was passed (1914), there was created a new body known as the Federal Trade Commission. This commission, appointed by the President with the advice and consent of the Senate, has two important functions. The first is to gather evidence of violations of the antitrust laws for the purpose of assisting in their prosecution. The commission is empowered to make investigations at the behest of Congress, of the President, of the Attorney General, or on its own initiative. In carrying out this work, it has full authority to compel witnesses to testify and to examine the books and files of the corporations which it is investigating. If it finds evidence of monopolistic abuses, it can submit such evidence to the Attorney General for prosecution, and it will assist him in the presentation of his case.

The second function is preventive rather than curative. The Sherman law was designed to break up monopolies after they have come into existence. The Federal Trade Commission has the more constructive task of checking unfair methods of competition wherever they occur. This serves not only to make methods of competition respectable, but it also helps to stop the growth of monopolies at their source, for many monopolies have attained their power by clubbing their competitors to death by unfair means. In doing this part of its work, the commission acts usually on the complaint of other businessmen. For instance, if a manufacturer of high-grade woolen garments finds one of his competitors selling at low prices garments which are represented to be all wool, but which are in fact part cotton, he may file a complaint with the commission. Any kind of competitive abuses, such as adulteration, false labeling, mendacious advertising, spying, bribery, rebating, the use of "knocker brands" and the like, may give rise to complaints of this kind. The commission investigates each complaint and holds a hearing

at which both sides have the privilege of presenting their cases. If it finds that the complaint was justified, it issues an order against the offending party to "cease and desist" from the objectionable practice. If this order is not obeyed, the commission can refer the case to the federal courts for enforcement.

The Federal Trade Commission Act did not define the terms *fair* and *unfair competition,* but specific content has gradually been given to these terms by the decisions of the commission and the courts in particular cases. In addition to this, the commission has held Fair Trade Practice Conferences from time to time for the purpose of setting up codes of fair practice for particular industries. Representatives of the industry concerned meet with the commission at these conferences, and the codes are adopted with the approval of both parties.

Another kind of preventive work by the commission has taken the form of *stipulations.* These arise in some cases where the commission, after investigation, finds combinations engaging in monopolistic activities which it holds to be in violation of the antitrust laws, but gives the offending party or parties an opportunity to escape prosecution by admitting the material facts and promising to "cease and desist forever" from the offending practices.

Consent Decrees.—Similar to the stipulations of the Federal Trade Commission are the *consent decrees* sometimes arising out of prosecutions brought against monopolies in the federal courts. In these cases the company, rather than attempting to defend itself against the charges, acquiesces in a court decree (prepared by the Attorney General) enjoining it from engaging henceforth in the monopolistic practices therein set forth. Should it thereafter resort to any of these practices, it would be guilty of contempt of court and could be punished summarily A famous illustration of this procedure is the consent decree accepted in 1920 by the five great Chicago concerns which then dominated the meat-packing industry of this country. In this case these firms promised to dispose of their interest in public stockyards, stockyard terminal railroads, stockyard market newspapers, public cold-storage warehouses, and retail meat stores. They also agreed to withdraw from such unrelated lines as groceries, fish, fruits, vegetables, canned goods, and numerous other products. Similar decrees in other industries from time to time have secured the abolition of monopolistic practices without the necessity for lengthy and expensive court action

The Changing Attitude toward Combinations.—In the period between the passing of the Sherman Antitrust Act and the First World War, American policy toward monopolistic combinations was well characterized by the popular phrase "trust busting." The attitude was that competition should be made to prevail by taking vigorous action against monopolies Trusts should either be nipped in the bud by the preventive work of the Federal Trade

Commission, or they should be broken up after the event by prosecution under the antitrust laws. At about the time of the First World War, however, there became apparent some change in the public attitude toward this problem. In spite of the antitrust laws, monopolies continued to prevail, and their persistence raised the question whether there was a basic trend toward large business organization which could not be balked. Particularly it was felt that American business firms were at a disadvantage in foreign trade, where they had to compete against powerful European combinations (such as the German cartels) that were permitted and even encouraged by their governments. As a result of this change in opinion, a number of laws were passed tending to encourage combinations in particular circumstances.

One of these laws was the Webb-Pomerene Act of 1918, which permitted American firms engaged in international trade to form combinations for their export business. These combinations were exempted from prosecution under the antitrust laws. Another evidence of the changing trend is to be found in the Transportation Act of 1920, which instructed the Interstate Commerce Commission to draw up plans for consolidating the railroads of this country into a number of integrated systems. The war brought home to the government the advantage of consolidating the industrial resources of our country in order to increase our productive efficiency. The general public, too, was beginning to appreciate the wastes of unrestricted competition and the economies of large-scale production. This transportation law, which actually brought government pressure to bear upon the railroads to consolidate, was a response to these influences. It remained for the great depression of the 1930's to crystallize the changing trend of thought in a more sweeping program of concerted business control.

The National Recovery Administration.—The depression prevailed at a time when both prices and wages were falling sharply, and businessmen were figuratively cutting each other's throats. It was widely believed that if they would agree upon a program to stop price cutting and to maintain good wages, the increased purchasing power of the workers would lead to greater demand for goods, and hence to recovery. Accordingly, in 1933, Congress established a National Recovery Administration (NRA) which was based upon that theory. In each industry a code authority was organized, consisting of representatives of employers and labor, which was empowered to draw up codes of fair practice which, when approved by the National Recovery Administrator, were legally binding on producers in the industries concerned. Although consumer representatives were included in the organization, they had only advisory powers, and their recommendations were pretty generally ignored.

Over 400 codes were filed in the first month, and were rather hastily approved. Since it was provided that the codes, when duly approved, would not be construed as a violation of antitrust laws, it is not surprising that

they included various provisions of a more or less monopolistic kind. Output was restricted by various devices, such as the fixing of quotas for individual producers, the setting of maximum machine hours per week that a firm could operate its plant, and regulations to limit the introduction of new machinery or the increasing of plant capacity. Other provisions tended to maintain high prices. For instance, some codes forbade producers to quote prices below certain established minima, others prohibited the selling of goods for less than cost, and there were various provisions affecting prices indirectly—such as extension of open price quotations, and rules requiring firms to observe a waiting period after announcing a price cut before the change could become effective.

Had the NRA experiment been continued over a longer period, perhaps its abuses would have been curbed, and enough coöperation might have been achieved to attain a better balance in the economy as a whole, while preventing unfair methods of competition. It seems fairly clear, however, that this would not have been accomplished without strong pressure by the government. We cannot rely upon self-regulation by business to protect the public interest. As it happened, the NRA was declared unconstitutional by the United States Supreme Court in 1935, so that the experiment came to an end in that year. Some industries continued many of their code provisions on a voluntary basis, and special legislation was subsequently passed to permit a coöperative program of control in the coal and oil industries, but the National Recovery Administration was abolished.

Recent Government Action Favoring the Decline of Competition.—With the end of NRA, pressure to reëstablish the protective features of the law put new legislation on the statute books of the federal and state governments. In 1935 the Bituminous Coal Conservation Act was passed, creating a national coal commission and twenty-three district boards, with wide powers to regulate the coal industry, including power to fix minimum and maximum prices and to control output within certain limits. This act was declared unconstitutional, but the essential features were reënacted in 1937, and that law stood the test of constitutionality. A similar law was passed to control the petroleum industry—the Connolly Hot-Oil Act of February 1935. This legislation directly forbids interstate commerce in excess of state production quotas. It created a Federal Petroleum Agency for enforcement. Since several oil-producing states had already passed control laws, the federal legislation was intended to support the state control plans.

On a quite different level, but equally designed to control competition, were the Robinson-Patman Act of 1936 and the controversial Miller-Tydings Act of 1937. These were designed to protect small retailers from the competition of chain stores and to sanction the fixing of retail prices by the manufacturers of trade-marked goods. These measures will be discussed more fully in Chapters VI and XX.

Concurrently, in the 1930's a wave of state barriers to the flow of interstate commerce developed By abuse of the power of taxation, protection of public health, and highway control, out-of-state competition is suppressed. Several states have laws requiring the use of locally mined coal in all state establishments. Quarantine laws for agricultural products discriminate against out-of-state products, and in some cases exclude certain products entirely. So-called "milk inspection" impedes the flow of milk over state lines. Over a quarter of the states have ports of entry (similar to customs stations on national boundaries) where quarantine and truck control laws are enforced. Special taxation against chain stores is becoming common License systems control new competitors in many lines on the principle of protection of public health and the stability of trade. Butter-producing states impose harsh burdens on the production and use of margarine—Montana required a license which cost $400 a year for the privilege of handling margarine, and Missouri required establishments serving margarine to mark all vessels containing the product *oleomargarine* or *impure butter*.

It is a confusing, and at the same time discouraging, spectacle to find the government restricting competition and encouraging monopoly and restraint of trade while at the same time voicing a belief in free competition, free enterprise, and vigorous opposition to all monopoly.

An Appraisal of Our Monopoly Policy.—It is apparent from the foregoing account that American policy towards monopolistic combinations and practices has been vacillating and experimental At times it has followed a course of vigorous prosecution under the Sherman and Clayton acts, especially in the administrations of the two Roosevelts At other times enforcement of these laws has been lax. Again, combinations have been encouraged in particular directions (in the export and railroad industries, for instance) and discouraged in others. During the depression of the 1930's we experimented with self-regulation by industry itself. Overlying the whole scene is the clear evidence of strong pressure groups getting what they want by special discriminatory legislation and, far more subtle, starving regulatory agencies when appropriation bills are enacted.

Some commentators hold that our courts have been at fault in the way they have interpreted and applied the antitrust laws. When prosecutions have been brought against trusts, the courts have been more concerned with abolishing the *forms* of combination than with restoring conditions of genuine competition in the industries affected. The usual practice has been to force dissolution of combinations found guilty of exercising unreasonable restraint of trade. This has usually meant that the offending company was broken down into a number of smaller companies, each stockholder in the parent concern receiving a proportionate number of shares in the new companies so created However, since the stockholders in such dissolutions continue to hold stock in all the new companies, there is still a community

of interests among the latter that tends to discourage active competition. For instance, when the Standard Oil trust was broken up, each of the supposedly independent companies that inherited its business operated in a certain region and did not invade one another's territory, so that the resulting situation was much like a pooling agreement. Independent companies that subsequently grew up in the several territories followed the prices set by the Standard companies. Nevertheless, in some of the other cases where monopolies were dissolved, active competition did ensue. Even in the case of the Standard Oil Company there has since occurred a gradual redistribution of stock; besides, new corporations have entered the industry and new oil fields have been developed, so that a considerable degree of competition has arisen. Hence, we cannot say that dissolutions under the Sherman law have entirely failed of their purpose.

Other critics feel that our prosecution of the antitrust laws would have been more effective if it had been less sporadic. On the whole, the attempts of the government to enforce the Sherman and Clayton acts have been rather halfhearted, except for the "trust-busting" crusades of an occasional administration. The staff in the Attorney General's office appointed to enforce these laws has been quite small and entirely inadequate to cope with the problem. Also, there has not been the close coöperation between the Federal Trade Commission and the Department of Justice that was intended when the commission was created. At times, too, the commission has been held in check by political pressure.

Furthermore, when prosecutions have been brought, juries have been reluctant to hold the directors and officers of offending corporations criminally responsible for their acts. Some critics believe that if such officials were punished personally for their crimes, under the penal provisions of the antitrust laws, there would be fewer violations. Businessmen may laugh at fines which often are not large enough to offset the gains which accrue from monopolistic practices, but they would surely hesitate to take actions that might send them to jail.

However, it is a wise legal principle that people should not be punished for acts, the criminal character of which is not clearly defined in the laws. Our present laws do not state explicitly what kinds of coöperative activity among business firms are permissible and what kinds are not. This makes it difficult for corporate officials to know what they may legally do, and what is illegal. Until the law clearly sets forth what constitutes fair and unfair competition and what will be construed as unreasonable restraint of trade, the more serious criminal penalties of the antitrust laws should not be invoked. Some progress in this direction is gradually being made through the decisions of the Federal Trade Commission and the courts, but the distinction between legal and illegal action in matters of this kind needs to be further clarified and codified and enacted into statute laws.

The Basic Principle for Policy.—In the judgment of the present writers, if we are to deal effectively with the problem of business combinations, we must base our program on the principle, already explained, that the optimum form of organization should be maintained in each branch of industry. This means that we must not adopt a policy of indiscriminate "trust busting," but must individualize our treatment according to the circumstances of each particular case. Where it appears that economic efficiency can best be promoted by the organization of an industry into one or a few large firms, we must recognize that some degree of monopoly is desirable. On the other hand, where it appears that the emergence of a monopolistic combination is not associated with economies of production, but is based solely on the desire for the profits of exploitation, it should be suppressed.

Two lines of action (both of which are already embodied in existing policy) will be helpful in separating these two types of cases. The first is the work of the Federal Trade Commission in suppressing unfair methods of competition. This work needs to be extended and strengthened. If business firms are prevented from using ruthless tactics in squeezing out their rivals, then they can rise to positions of dominance in their respective industries only by developing superior efficiency—that is, by producing better products or by reducing their costs and prices below those of their competitors. To the extent that we succeed in making unfair methods of competition impossible, we can be safe in construing the growth of a business to a position of great size and power as evidence of better service to the public.

The second course is to apply with careful discrimination the "rule of reason." This wise principle assures the business firm that grows to power without abusing its rivals or its customers that it will not be persecuted. At the same time it holds over the heads of businessmen whose dominant positions are clouded by predatory behavior the weapons of fines, dissolution, and possibly prison terms.

In those cases where the principle here espoused suggests that monopolistic combinations should be permitted, broad measures of governmental regulation are to be recommended. No matter how efficient a big concern may be, if it has monopolistic powers it may be tempted to exploit them to its own advantage unless supervised by some public authority. When the restraints of competition are gone, the public interest must be protected by other means. This has already been accomplished in the case of the public utilities, where monopolies are legally sanctioned, by placing these enterprises under the control of regulating commissions. It is probable that similar methods will have to be extended progressively to other monopolies as time goes on. In the end it may prove desirable for the government to own and operate some or all of the industries where the public interest can best be

served by unified control. We shall deal with these matters more fully in Chapter V.

SUMMARY

In each industry there is an optimum business unit—an organization that can produce its goods at the lowest average unit cost. The optimum depends largely upon technical, managerial, financial, and marketing factors, and on advantages connected with the assumption of risks. In many industries the optimum unit is large because of the various economies that result from large-scale production. These advantages are most marked in industries handling heavy products, requiring elaborate plants, using homogeneous materials, requiring complex assemblies of parts, using limited natural resources, engaged in retail distribution, or engaged in handling large numbers of risks (insurance). Small size is favored by: technical factors which cause the optimum firm to be small, restricted markets, the red tape of large organizations, and the persistence of individual initiative.

Integration may be horizontal, vertical, or lateral. Integration secures the advantages of large-scale production, distribution and financial techniques, plus the elimination of middlemen, avoidance of duplicating plants and executives, and better coördination of the successive stages of production. However, some integrations have failed because they have grown beyond the optimum size and have sought profits through exploitation instead of through economies of production.

An industry may be characterized by pure monopoly, monopolistic competition (oligopoly and product differentiation), or pure competition. If the seller controls enough of the output to influence price, some degree of monopoly is present. Industrial concentration is increasing in this country. Conditions favorable to its growth are: localization of resources, economies of large-scale production, control of large capital funds, secret processes, patents and copyrights, exclusive franchises, and government ownership. Forms of monopolistic organization include the pool, trusteeship, holding company, merger, and cartel. Looser forms of combination include informal agreements, interlocking directorates, marketing coöperatives, trade associations, and price leadership. Some combinations are international. Industrial concentration has some potentialities for increased efficiency, but unregulated monopolies have more often been characterized by abuses than by social benefits.

American policy has been to regulate public utilities, but to enforce competition in other industries. Under the Sherman Antitrust Act, as interpreted by the Supreme Court, combinations in unreasonable restraint of trade are illegal, subject to dissolution, and their officers liable to criminal penalties. The Clayton Act clarified and strengthened this law. The Federal Trade Commission helps administer the law by making investigations and

securing evidence. It has the power to prevent unfair competition through cease and desist orders, fair trade practice conferences, and stipulations. Through the use of consent decrees, compliance is frequently accomplished without formal trial.

In recent years combinations have been encouraged for export and in railroads. The National Recovery Administration experimented with self-regulation of prices, output, and trade practices by industries, but the law was declared unconstitutional. With the demise of NRA, special legislation restored some of the regulation in bituminous coal and petroleum industries. Both federal and state governments have contributed to the decline in competition by legalizing price maintenance, legislating against the growth of chain stores, and creating barriers against free interstate commerce.

Our antitrust policy has been criticized because dissolutions have been aimed at breaking up the mere form of combinations without restoring true competition, and because enforcement has been sporadic and inadequate. A sound policy should be based on the principle that combination should be permitted when it contributes to economic efficiency, but dissolved when it does not. Measures to help make this distinction are the rigorous suppression of unfair methods of competition by a strengthened Federal Trade Commission, and judicious use of the rule of reason. Where monopolies are permitted, they should be strictly regulated by government commissions, or owned and operated by the government.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

Alfred Marshall's *Industry and Trade* (1921) is a scholarly and penetrating treatment of the dominant tendencies of business organization in the modern economy Good, concise discussions of business organizations and their development are found in Horace Taylor's *Making Goods and Making Money* (1928), especially in Chapters III and VI. We relied heavily on E. A. G. Robinson's *The Structure of Competitive Industry* (1932) for material on the concept of the optimum firm Valuable help on large-scale production and combinations was obtained from F. W Taussig's *Principles of Economics* (4th edition 1939) Chapters IV and VI For statistical data on the changing structure of industry see W H Thorp, in *Recent Economic Changes* (1929) Vol I, pp. 167-219. This study was continued by Professor Thorp in an article entitled "The Persistence of the Merger Movement," in *The American Economic Review Supplement*, March, 1931.

An interesting and vigorous attack on the problem of monopoly is F. A. Fetter's *The Masquerade of Monopoly* (1931) A R Burns' *The Decline of Competition* (1936) is an able study of the growth of imperfect competition. R A Brady, in *Business as a System of Power* (1943), sees the growth of big business as a step toward a totalitarian political state T W. Arnold's *Bottlenecks of Business* (1940) is an excellent popular presentation of the abuses of monopoly power, and is especially rich in illustrative material See also H L Purdy *et al.*, *Corporate Concentration and Public Policy* (1942)

The best analysis of the broad problem of industrial control is J. M. Clark's *The Social Control of Business* (1939). A comprehensive and very readable treatment is one by M. Fainsod and L. Gordon, *Government in American Industry* (1941). See also H. D. Koontz, *Government Control of Business* (1941). The voluminous publications of the Temporary National Economic Committee furnish an inexhaustible source of material on the growth of concentration and monopoly in the United States. We recommend especially three of the monographs: Clair Wilcox, *Competition and Monopoly in American Industry;* Walton H. Hamilton, *Patents and Free Enterprise;* and Willard L. Thorp, Walter F. Crowder and associates, *The Structure of Industry.* Case studies of a number of international cartels are contained in *Cartels in Action* (1946) by George W. Stocking and Myron W. Watkins. A concise digest and critical appraisal of the voluminous TNEC hearings (but not of the monographs) is given by David Lynch in *The Concentration of Economic Power* (1946). Vernon A. Mund, in *Open Markets: an Essential to Free Enterprise* (1948), traces the decline of free markets and proposes that the government establish and maintain such markets for the basic products of industry as a solution for the monopoly problem.

CHAPTER IV

Problems of Corporation Finance and the Securities Markets

A. The Market for Corporate Securities

Relation of the Corporation to the Market for Capital Funds.—The corporation is a form of business organization arising out of the need of modern industry for large aggregations of capital. Hence, corporations are the principal users of investible funds offered in the financial markets. The first problem in starting a new corporate venture is to obtain some of these funds for the projected enterprise by the sale of securities to the investing public. After the initial financing has been accomplished and the corporation has become a going concern, it may need additional funds as its business expands. These may be obtained by the sale of new issues of stocks or bonds or, if the funds are needed only for short periods, by borrowing from banks. Furthermore, since the securities of a corporation are transferable, there must be some outlet through which stockholders and bondholders can dispose of their holdings by sale to other investors. The institutions through which these operations are carried on constitute what is known as the capital market. Our present task is to examine the social aspects of this market and the activities that go on in it.

The Promotion of a Corporation.—In order for a corporation to become established, there must be someone to take the initiative in starting it. Such a person is known as a *promoter*. He may be someone already actively engaged in the industry who sees an opportunity to launch a new venture, and who assumes the role of a promoter temporarily with the intention of remaining in the new business as its permanent head. However, there is a special class of businessmen who are professional promoters. They make it their business to discover new business opportunities and to initiate new enterprises. After they have accomplished their work of promotion in a given case, they leave the management of the new business in the hands of permanent officers and depart to embark upon some other project. These men study markets, new trends in production, scientific developments, possibilities for increasing profits by combining several competing companies into one, and all the various opportunities which the ever-changing picture of the dynamic business world presents. They cultivate contacts with wealthy

capitalists who have funds to invest, and with investment bankers; they keep in touch with the investing public at large; and they are thoroughly familiar with the legal and technical details of incorporation. They combine qualities of imagination, boldness, and persuasiveness that are needed to see where opportunity lies and to induce others to take the risks of exploiting that opportunity.

The chief problem which confronts the promoter is how to obtain financial backing for the proposed corporation. One method of obtaining such backing is to appeal directly to the investing public for subscriptions to the stock of the new enterprise. Prospective investors can be reached through salesmen, newspaper advertising, circulars sent through the mail, and so on. This method is used chiefly in the case of local industries, real estate developments, and a few special types of businesses such as banks and coöperatives. It is also used to lure the unwary into highly speculative ventures that would not be likely to attract careful and well-informed investors. If the prospective business is less dubious, but still rather venturesome, the promoter may seek the support of a few large businessmen who are bold enough to be willing to risk considerable sums on a likely chance; or, he may perhaps obtain the services of a firm of investment bankers specializing in speculative securities. If the project is to consolidate a number of already well-established enterprises, or to create a subsidiary corporation, it is more likely to appeal to conservative investors. In this case the promoter may go to investment bankers who specialize in more conservative types of investment.

The promoter may invest funds of his own in the new corporation, but he relies mainly on others to supply the necessary capital. He is not an investor, but an organizer. For his work of promotion and organization, he usually receives a considerable number of shares of stock in the corporation he has created. When the organization is completed and the business has become a going concern, he may (if he is not a professional promoter) retain an active interest in it; very likely he may become the president or one of its principal executives. However, if he is a professional promoter, he will not want to remain long associated with it, for it is his specialty to start new enterprises, not to direct existing ones. In this case he will sell his stock in the new enterprise as soon as it becomes of sufficient value in the securities market. If the promotion has been successful, he may reap a large profit from this sale. He will then look for an opportunity to launch another venture, leaving businessmen of another type in charge of the new concern.

The work of promotion is very necessary and useful, but it can be abused. Some promoters are persons of the reckless type who do not scruple to initiate very risky projects, as long as they are financed with other people's money. Gullible investors are duped by promises of great riches displayed in glittering circulars or pictured by slick salesmen. The victims put their savings into dubious or even fraudulent projects, and when the enterprises have been

launched, the promoter cashes in his share before the bubbles burst He then departs, leaving the stockholders in possession of a business that is sure to fail. The prevention of this "wildcat" kind of promotion is one of the important problems of corporate regulation.

Investment Banks.—There is a special class of institutions, known as investment banks, whose function is to act as middlemen between corporations seeking to market their securities and investors looking for desirable investments. These firms are private organizations. Often organized in the partnership form, they usually have an established clientele of customers who rely upon them for advice about their investments. Both corporations and investors derive distinct advantages from having these middlemen as go betweens. Since the investment bankers are specialists, they have a broad knowledge of the market for securities which is very useful to corporate managements seeking funds for expansion. The investment banker can advise the managers as to the best type of security to issue for their purpose, and he is in a position to guarantee the sale of the securities to his established patrons. Investors gain because of the superior knowledge which the banker has about the affairs of the corporations whose securities he offers for sale A reputable banker will not undertake to sell the stocks or bonds of a corporation without first obtaining a satisfactory report concerning its financial condition, and he is in a position to demand detailed facts which the individual investor could not secure Moreover, since the banker deals with many corporations, he has a broader and more detached view of the business world and of expanding and declining industries, which puts him in a position to give wise advice to both managements and investors. Sometimes, if a corporation finds itself in financial difficulties, the investment banking firm that has previously assumed responsibility for selling its securities to the investing public will come to its aid with financial help to tide it over a hard period The firm does this in order to maintain the confidence and continued patronage of the investors who are its patrons, and who might lose their faith in it if the securities it had previously sold to them proved to be a source of loss

There is a considerable amount of specialization among investment banks as to the types of securities they handle Some deal primarily in bonds, these cater mostly to conservative investors Others deal chiefly in common stocks, these cater to investors of a more speculative kind Preferred stocks may be handled by either type of banker. Some sell securities in wholesale lots, others are retailers

In addition to providing an outlet for new securities, investment bankers will often maintain a market for securities which they have previously sold to their patrons, in case the latter wish to dispose of their holdings There are organized stock exchanges (presently to be described) through which many of the securities issued by the better known corporations can be bought

and sold, but there are many securities not listed on these exchanges. Investors would be reluctant to put their money into unlisted stocks or bonds if there were no channel through which they could resell them in case they desired to recover their money. The investment bankers, therefore, find it good business to provide such a service, acting as brokers for the sale of the securities to other clients. Since the investment bankers are usually members of the stock exchanges, they will also make purchases and sales on the exchange for their clients. For such brokerage services they charge a small commission.

Notwithstanding these useful functions, investment bankers are often criticised—sometimes with justice. Investors complain that they are inadequately protected by the firms from whom they buy securities. It must be admitted that supposedly reputable investment bankers have sometimes marketed securities in enterprises whose unsoundness would have been clearly known to the bankers if they had made adequate investigations. The investing public has lost large sums of money in this way. Corporations complain that investment bankers, as a condition to handling their securities, sometimes interfere too much in matters which should properly be left to management; also that their charges for services to corporations are excessive. Finally, some critics have alleged that a few large investment banking firms have acquired such power that they maintain a virtual monopoly of the securities market, so that corporations seeking funds are compelled to accept their terms if they are to obtain the capital which they need. This last charge has not been proved, and is probably a gross exaggeration.

Underwriting.—When a promoter or an established corporation asks a firm of investment bankers to market an issue of securities, the bankers will put experts to work analyzing the proposed new issue. If they find it sound and worthy of their support, they will agree to purchase outright all of the securities, usually at a discount—that is, at less than their face value, by perhaps as much as 20 per cent. If the issue is large, the banking house approached may ask others to associate themselves with it in "floating" the issue, thus forming what is called a *syndicate*. The securities so purchased are apportioned among the various banking and brokerage houses throughout the country and sold to the investing public by individual salesmen employed by these outlying smaller institutions. This practice of guaranteeing the sale of an issue of securities is known as *underwriting*. By this means the promoters or officers of a corporation are assured of the money necessary to inaugurate a new business or to expand an old one. The bankers make such guarantees with confidence because they know that they have previously built up a market for the securities offered by their firms. Once a particular issue has been sold to the public, the banking house which underwrote it may then step out of the picture, but some firms retain an interest in the businesses whose securities they have marketed even after they are no longer

heavily interested financially. As stated above, they will sometimes give additional support to a company to protect it from failure in order to maintain the good will of their customers. No banking house can hope to succeed if a large percentage of its security issues turn out to be failures.

Stock Exchanges.—Since the stocks and bonds of corporations can be transferred freely by their present holders to other persons, there is an active market for the purchase and sale of these securities. An important part of this market consists of the stock exchanges, of which there is one or more in most of our larger cities. The New York Stock Exchange is by far the largest and most important of these, and the one after which most of the others are patterned. This organization is a private, unincorporated association of more than a thousand members. The members are brokers who execute orders for other persons on commission, and traders who deal in securities on their own account. Most investment bankers have memberships in one or more stock exchanges. The privilege of trading on the floor of the exchange is valued very highly, memberships (known as "seats") having sometimes been sold for as much as several hundred thousand dollars. Transactions between members of the exchange are governed by a strict set of rules enforced by a governing committee. These rules are intended to set up standards of fair dealing and to prevent abuses. Only approved securities of corporations already well established are admitted to transactions on the exchange; for a security to be listed, the corporation in question must comply with definite requirements designed to disclose its financial standing and the state of its business. New enterprises, and older ones of doubtful standing, must find a market for their securities elsewhere, either through investment bankers and brokers, or by direct appeal to the public as described above. So, while the stock exchange does not guarantee the securities traded in it, the investigation made by the listing committee assures the public that the corporations concerned are at least bona fide going concerns. Some exchanges are less conservative than others. For instance, the New York Curb Exchange lists securities which are not accepted by the New York Stock exchange. Local exchanges in the various cities also usually list the securities of local corporations not widely enough known to be sold in a nation-wide market.

Stock Speculation.—The stock exchanges are primarily markets for speculation; that is, for buying and selling securities in the expectation of profiting by an anticipated rise or fall in their prices. As the earnings of a corporation go up and down, ownership of its stocks becomes more or less desirable, and their market prices fluctuate accordingly. It is these fluctuations that afford an opportunity for speculative profits. Sometimes the prices of stocks will change very rapidly and fortunes can be made or lost in a few days by those who speculate in them. In order to facilitate such speculation, there has been developed an elaborate system of telegraphic communication by which

the terms of every sale in the exchanges, as well as important bits of business news and gossip, are quickly made known in brokers' offices throughout the country. It is further facilitated by the financial items printed in the newspapers, by special financial journals and business forecasting services, and by the publicity of accounts required of corporations whose securities are listed on the exchanges.

It is claimed that three useful functions are performed by this speculation. These are: the maintenance of a continuous market for securities, the guiding of new capital into the most profitable fields, and the discounting of future business conditions.

As to the first of these functions, the existence of a continuous market, in which securities may be immediately converted into cash if the owner so desires, undoubtedly stimulates investment. The average person would be unwilling to invest in corporate securities if the possibility of selling them quickly in case of need were removed. There is always an immediate market for securities which are listed on the organized stock exchanges. This is also of assistance to commercial banks in making loans to business men. Banks are glad to make such loans if the borrower can pledge with them, as collateral security, bonds or stocks which are listed on a stock exchange. The bank can then watch their market value, as quoted on the exchange, and sell them for enough to cover the loan, should this be necessary to protect itself against default by the debtor.

The second function, that of guiding new capital into the most profitable channels, is accomplished by the publicity given to security prices and yields in the daily reports of stock exchange transactions. Investors will ordinarily avoid the purchase of new security issues offered by industries which are showing a poor yield; they will be more likely to put their money into issues of those corporations and industries which show high earnings and bright prospects, as revealed in the market prices of securities already established.

The discounting function is said to operate as follows. Changes in general business conditions, or in the conditions of individual enterprises, presumably become known to "insiders" or speculators before they take place, or at least before they are known to the general public. Speculators then seek to take advantage of this knowledge by buying or selling the securities likely to be affected favorably or adversely by the expected change. This buying and selling gradually raises or lowers the prices of the securities. When the anticipated event occurs, the price of the securities has already been adjusted to it, and the sudden change in their value which would otherwise result is thus prevented. To some extent this discounting makes it possible for investors at large—by watching the trend of stock prices—to anticipate certain changes in business. Stock market price movements usually anticipate by some months changes in business activity itself. This principle is utilized by the various agencies now engaged in business forecasting. It also gives

bankers and investors more time to protect themselves against impending adversity in those cases where securities have been pledged as collateral for bank loans.

Margin Trading and Stock Exchange Abuses.—While undoubtedly the stock exchanges do perform the useful functions claimed for them, in the past there have been serious abuses which have offset these advantages to a considerable extent. For instance, for many years it has been the practice of speculators to buy stocks "on margin." Under this practice, a speculator could purchase stocks through a banker or dealer by depositing only a fraction of the purchase price with him. The dealer or banker would supply the rest of the money needed to make the purchase—thus, in effect, making a loan to the purchaser—and would hold the stock as security. For instance suppose someone has received a "tip" to the effect that the DuPont Corporation is about to bring out a new chemical discovery that will prove sensational. Anticipating a rise in the price of this company's stock when the facts become public, he desires to profit by this increase. He makes a deal with his broker to purchase $25,000 worth of this stock on a 20 per cent margin. He pays the broker $5,000, which is 20 per cent of the investment Now, if the stock goes up in accordance with his expectations, he can presently sell it for, let us say, $40,000. This is sufficient to repay the loan with interest to the broker, return his own investment, and yield him a profit of nearly $15,000 besides. It has been a very successful speculation. But suppose he has been misinformed, and that the stock goes down in price instead of up. If it falls to somewhere near $20,000, the broker, fearing that the value of the stock will no longer be sufficient to protect his loan, will compel the buyer to put up more cash, or he will sell the stock at once. If he sells the stock, the buyer suffers a loss; if the buyer puts up more margin, he runs the danger of losing a still larger sum if the stock should continue to fall. If he is a small speculator, he may lose the greater part of his savings in this way.

This practice of margin trading has several evil effects. It is responsible for a large volume of bank loans that are based on a rather precarious foundation. Amateur investors, attracted by the ease with which a large purchase of securities can be financed on a small investment, are encouraged to take a "plunge" on a rising stock market. The active demands for securities thus created force their prices up to unreasonable levels. Sooner or later it is discovered that corporate earnings do not justify these high prices, and they fall. Then the margin traders are caught, and, having insufficient capital with which to increase their margins, they are forced to sell the stocks at sacrifice prices, thereby losing their investments. The stock market is very volatile, because stock prices depend so largely on guesses as to the uncertain future, and are influenced by rumors and conjecture. Waves of optimism and pessimism spread through the market like a contagion, forcing prices

now up, now down, sometimes with such rapidity that huge fortunes can be made or lost in a single day The great stock market boom of 1929 and its headlong crash in November of that year will be long remembered as one of the great financial debacles of recent times It brought financial ruin to thousands of people, and embarrassed many banks whose funds had been used to finance stock purchases on margins The practice of margin trading aggravates these upward and downward swings, because it multiplies *by several times the effect of each investment in the market.*

It can be divined that much of the activity that goes on in the stock exchanges passes the bounds of reasonable speculation, and is little more than gambling There are professional speculators whose stock market dealings are based on good judgment arising out of broad knowledge and careful study of such matters as changing demands, expanding and declining industries, and the quality of corporate managements; but there are so many uninformed and irresponsible dabblers in the stock market that its usefulness is considerably impaired Furthermore, there are often groups of traders who *manipulate the machinery of the market* to their own advantage at the expense of other investors. For instance, such a group may wish to buy up the common stock of a certain corporation, either because they wish to gain control of the business, or merely to sell the stock later at a profit. In order to buy this stock cheaply, they may circulate false rumors derogatory to the company, or they may engage in "wash" sales, selling and reselling their own stock to dummy purchasers at low prices, in order to frighten other investors into selling their shares in the corporation. The manipulators buy up this stock and then proceed to operate in exactly the opposite manner, now making dummy purchases and circulating encouraging reports, thereby forcing the price up to a point at which they can sell their holdings for a substantial profit It is not difficult for professionals to dupe the many amateur investors in the stock market by methods of this kind. Sometimes irresponsible brokers will even stoop to the practice of speculating on the market with their customers' funds, a criminal offense which, if discovered, will expose them to serious punishment

Public criticism of these practices, and the consciences of honorable bankers and dealers who realize their evil effects, have led to the adoption by various stock exchanges of progressively better rules to curb some of the worst abuses. These rules limit the securities listed on the exchanges to those corporations that have been investigated and approved by their listing committees, and they set up certain standards of financial responsibility and business conduct which must be observed by their members. However, there are speculative activities by nonmembers outside of the stock exchanges which cannot be controlled in this way, and besides, the members of the exchanges cannot be expected to govern themselves with the same rigor and regard for the public interest that a public regulatory body would be likely

to enforce. Therefore, there has been a trend toward increasing regulation of the securities markets by government.

State "Blue Sky" Laws.—Most of the states in this country have made some effort to prevent fraud in the sale of securities, and to check unethical performance on the part of dealers in stocks and bonds, by the passage of so-called "blue sky" laws. Under these laws a commission or official is appointed whose approval must be obtained before security issues can be offered for sale to the investing public. The laws usually require that the securities be clearly designated and labeled so as to show the quality of risk they involve, whether secured by mortgages, or unsecured, and so on. The issuing corporations are also required to publish certain facts about their promoters, officers, and directors, the financial position of the company, compensation paid to promoters, and the consideration received for stock not sold for cash. The commissions which may be paid to salesmen for selling stock are limited. Securities may be exempted from these regulations if they are listed upon recognized stock exchanges (whose rules presumably provide sufficient protection), or if they are regulated by some other public service body, such as a public service commission or banking department, or if they are handled by established investment bankers, or if they are government bonds. These exemptions have the effect of limiting the legislation mostly to those securities which are offered to the general public outside the organized market. It is in securities of this type that the most fraudulent promotion schemes are likely to be found. The laws derive their name from the idea that they are intended to prevent the sale of the blue sky to unwary investors.

As in many matters of public regulation, so here, the existence of forty-eight different states with different standards impairs the usefulness of these laws. They vary widely from state to state, so that in some jurisdictions the investor is given very little protection. In general, they have not provided as much protection as was needed, and they do not extend to interstate sales. This has made it possible in many cases for the operators of certain kinds of stock swindles to escape prosecution by simply moving to another state. As a result of these conditions, there was a great deal of pressure for federal regulation. This led to the passage in 1933 of the Federal Securities Act, providing such regulation, and in 1934 of the Securities Exchange Act, amending its predecessor and creating a Securities and Exchange Commission.

Federal Regulation of Securities Selling.—The purpose of the Federal Securities Act (in its own language) is "to provide full and fair disclosure of the character of securities sold in interstate and foreign commerce, and through the mails, and to prevent frauds in the sale thereof." It aims to accomplish this primarily by compelling corporate officials to give investors adequate information about the companies in which the latter are asked to

invest their funds. Where an issue of securities amounting to $300,000 or more is offered for sale beyond the confines of a single state, or by mail, the issuing corporation must file with the Securities and Exchange Commission an elaborate registration statement, setting forth in detail the essential facts concerning the securities, the company, its management, the purpose for which the securities are being issued, and further information concerning the financial position of the company, the salaries of its officers, its options, contracts, and other data.

Dealers who participate in the sale of securities must provide their customers with prospectuses which contain a condensation of the material set forth in the registration statement. Registration statements and prospectuses are critically examined by experts on the staff of the commission before the securities are marketed. If the statements are found to be misleading, inaccurate, or incomplete, the company is given an opportunity to amend its statements; but if suitable information is not forthcoming the commission can, after a public hearing, refuse to accept the statement and thereby deny to the corporation the right to offer its securities for sale. Furthermore, corporate officials and security dealers are subject to criminal prosecution and punishment for violations of the law or for willfully making misstatements of fact in connection with their registration statements or prospectuses; and where there have been untrue statements or withholding of material facts, purchasers can recover damages from the issuers of the securities, and from directors, accountants, engineers, or others who have been responsible for such errors, unless the defendants can show that the losses were not caused (or were only partly caused) by the misinformation. Where an issue of securities is less than $300,000 in amount, registration statements are not required, but officers and dealers in such cases are held responsible for inaccuracies or omissions in their prospectuses, the same as for larger issues, if complaints bring the cases to the attention of the commission.

Of course, the government does not undertake to protect investors against the ordinary risks that are inherent in every business. A business enterprise is a venture that is always fraught with some uncertainty, and the investor must face the chance of possible failure; but he can and should be protected against fraud, and he can and should be given honest statements of fact in order that he may have a reasonable basis for judgment. That is what the Federal Securities Act is designed to accomplish. If the act is wisely administered and effectively enforced it can be of great benefit. The general opinion among impartial observers appears to be that the Securities and Exchange Commission is doing its work well. It has compelled corporations to make such complete disclosures of facts that it is now difficult for fraudulent promotion projects to gain access to the securities markets.

The Securities and Exchange Commission.—The Securities and Exchange Commission (commonly called SEC) is a bipartisan federal body of five

members, appointed for five-year terms by the President, with the advice and consent of the Senate. Its work is not only to enforce the provisions of the Federal Securities Act, but to regulate the whole business of trading in securities.[1] In order to accomplish this, it has power to regulate the stock exchanges, as well as over-the-counter sales taking place outside the exchanges. Stock exchanges must be registered with the commission, which is authorized to regulate their rules of trading, so as to prevent abuses. Brokers and dealers doing an over-the-counter business must also be registered. These dealers are regulated through a voluntary organization known as the National Association of Securities Dealers, Inc., which is subject to the commission's jurisdiction. All brokers and dealers who have not been disqualified because of unethical business practices are eligible to membership in this body. All security issues listed on the registered stock exchanges must be individually registered with the commission, which can compel the provision of adequate statements as a condition to such listing. This brings under the supervision of the commission securities issued prior to the passage of the Federal Securities Act. The commission requires periodic reports (which are open to the public) from corporations whose securities are listed. This keeps the registration statements up to date. The commission is further empowered to prescribe the kind of accounts to be kept by members who trade on the exchanges, and to examine the books of these members from time to time. It may suspend trading in any issue of securities which does not comply with its rules concerning registration, and it may even suspend the stock exchanges themselves.

The Securities Exchange Act forbids certain manipulative practices and provides serious penalties for violations. This makes it illegal to circulate false information about securities, to 'rig' the market to force prices upward or downward, or to engage in fictitious transactions such as "wash" sales. Pools (that is, groups of traders) to buy or sell stock are permitted, but they must be registered with the commission, and they cannot use publicity to force security prices up or down. There are also provisions designed to prevent officers and directors of corporations from using their positions to advance their own interests at the expense of their stockholders. These will be explained in a later paragraph. To control dealings on margin, the Board of Governors of the Federal Reserve System (rather than the Securities and Exchange Commission) is given the power to fix margin requirements, and brokers' loans can be made only through banks that are members of the Federal Reserve System, or that have agreed to abide by its margin requirements.

[1] It also administers the Public Utilities Holding Company Act, which will be described in Chapter X, and it has certain powers of supervision over investment trusts, investment companies, and indenture trustees, and over corporation reorganizations in the federal courts arising out of bankruptcy. These last are matters with which we shall not be concerned.

It can be seen from the foregoing account that the Securities and Exchange Commission is a very powerful body, which has an enormous task of supervision. To facilitate this task, it has set up ten administrative zones in the United States, with a regional office in each zone. It is generally agreed that the commission has made wise use of its powers, and that it has reduced the abuses of the stock exchanges without impairing their usefulness. Corporations have complained that the statements they must file are unreasonably detailed, involving excessive clerical costs; and there has been some fear that the commission's regulations would hamper legitimate trading and discourage new security issues. However, the requirements of the commission on the whole appear to have been not unreasonable, and no more than is necessary to check some of the flagrant abuses which were formerly widespread. The entrance of the federal government into the field of securities market regulation represents a needed improvement. The effects in the long run will undoubtedly be beneficial, and it will probably be firmly established as a part of our accepted institutions.

B. Problems of Corporate Financial Structure and Control

The Corporation as an Artificial Person.—In the famous Dartmouth College Case, Chief Justice Marshall said, "A corporation is an artificial being, invisible, intangible, and existing only in the contemplation of the law." As a result of this interpretation, the corporation has come to be regarded by the law as a fictitious person, an entity separate and distinct from the stockholders who own it and the officers who direct its management. It can own property, sue or be sued in the courts, and make contracts in the conduct of its business, just as if it were a real person or citizen. If a passenger suffers injury arising out of defective equipment in a street railway car, he brings suit for damages, not against the president, directors, stockholders, or employees of the corporation, but against the corporation itself. And if a corporate enterprise enters into a contract with some other business organization to buy or sell goods, the contract is made in the name of the company, not in the name of the people who own or manage it.

Because of this conception, the officers who direct the affairs of a corporation operate behind a screen which shields them to a considerable degree from personal responsibility for their acts. It has often been said that a corporation has no soul. This is merely another way of saying that its officers will do things in its name that they would not do under their own names. The corporate organization has introduced an impersonal element into business that leads to much unethical behavior. Wrong doing arises not only in the relations between the corporation and its customers and competitors, but also inside the corporation itself, in the relations between the directors and managers on one hand, and the larger group of stockholders on the

other. We must consider some of these abuses, particularly those of the latter sort.

Capitalization, Overcapitalization and Stock Watering.—Ordinarily, a bond or a share of stock is supposed to represent the investment of a certain amount in the capital of the company concerned; and this amount (which is stated on the bond or stock certificate) is known as the *par value* of the security in question. The total par value of all the outstanding stocks and bonds of a corporation is said to be its *capitalization*. For instance, a company with 100,000 shares of stock with a face value of $5 per share and with $500,000 of bonded indebtedness would be said to be capitalized at $1,000,000. But this capitalization does not always correspond to the actual investment of the stockholders and bondholders. Occasionally the investment may exceed the capitalization. This will be the case where, as a result of profitable business and reinvestment of earnings, the company has been able to expand its plant without borrowing and without selling new securities. In such a case, the company may be said to be *undercapitalized*. More often the nominal capitalization will exceed the amount of investment, in which case the corporation is *overcapitalized*. Overcapitalization may be the result of loss of assets, caused perhaps by ill fortune or poor management. In a great many cases, however, there is deliberately issued a volume of securities far exceeding the actual investment in the company's assets This practice of inflating the capitalization is known as *stock watering*. It results in abuses that are of concern to both investors and the public at large. Let us therefore consider how such stock watering takes place, the motives behind it, and the consequences which flow from it.

The stock is often watered by promoters at the time of incorporation They may sell bonds or preferred stock to the investing public, but keep most or all of the common stock for themselves. They invest no money, but take the stock gratis as their reward for organizing the corporation The holders of the bonds and preferred stock thus provide all the capital for the business, but the promoters, as the principal owners of the common stock, have legal control of the company, and will receive most or all of any profits that may be made, after interest on the bonds and dividends on the preferred stock have been paid

Another way in which watered stock may be used is to make the sale of stock attractive to investors, making it appear that the latter are getting more than their money's worth A common scheme, for instance, is to offer for sale a certain quantity of preferred stock at its par value, while giving with it a bonus of common stock Preferred stock in such a case represents cash actually paid in, while the common stock is simply so much paper issued to purchasers of the preferred stock to attract them to the proposition.

Again, stock watering often takes place when several independent corporations are consolidated into a single new enterprise. Suppose that five

competing electric companies in a large city have plants whose actual cost was $100,000 each, and that this cost is represented by shares of stock with par value equal to that amount—a total of $500,000. A group of promoters may conceive the idea of amalgamating these five companies into one, thereby creating a monopoly which, by the elimination of competition, will be able to charge higher rates for its service than the separate companies are able to charge, and thereby increase the profits. In order to induce the present stockholders of the several companies to consent to such a merger, the promoters may offer, in exchange for the stock of these companies, say $1,000,000 worth of stock in the new corporation. Each stockholder of the original companies receives stock in the new corporation equal to twice the par value of his former holdings. We now have one corporation owning all five plants. The plants represent no more real capital than before and no additions to them are made, but the nominal capitalization is now $1,000,000, or twice their actual cost. In other words, the stock has been watered by 100 per cent. Merely by printing pieces of paper which bear figures double the amount of the old ones, it has been made to appear as if there were twice as much capital!

By virtue of the monopoly which has been created, it is possible that the new company can earn profits which will pay dividends on the new stock just as high as, or higher than, those which were paid on the stock of the formerly separate concerns. Moreover, the holders of this watered stock will expect to receive such dividends. If the old corporations were paying profits of seven per cent on an investment of $500,000, the new company will be expected to pay dividends of seven per cent on a capitalization of $1,000,000, which can be accomplished only by an increase in the prices which they charge for electrictiy. The stockholders will now be receiving 14 per cent on their actual investment, but this high profit is concealed by the overcapitalization, which makes the return appear only half of that. This extra profit the consumers of the current will have to pay, and it is herein that one of the evils of overcapitalization rests. In nearly all consolidations of corporations in this country—in the organization of mergers and trusts and combinations of various sorts—overcapitalization has gone on, and it has served to conceal high earnings derived from the sale of commodities and services at exorbitant prices.

Stock Dividends.—In addition to the cash dividends which corporations pay to their stockholders as their share in the earnings of the business, they sometimes issue what are known as *stock dividends.* These consist of additional shares distributed gratis to the stockholders, in proportion to their present holdings. There are many cases where stock dividends of 25, 50, 100 per cent, and even more, have been issued by conspicuously successful enterprises. Often these stock dividends represent real increases in the corporation's capital, arising out of reinvested earnings. Where a business has been

profitable, its directors may have decided to use some of the profits to extend the company's plant or to develop new branches of the enterprise. If this has occurred, the stockholders really own more capital than is indicated by the par value of the shares they hold, and the company is undercapitalized. Under such circumstances a stock dividend is simply a way of distributing to shareholders new certificates which represent the new capital that has been accumulated. There need be no overcapitalization in this proceeding; the capitalization is merely corrected so as to correspond with the actual investment. It may nevertheless constitute an abuse, in that it may thereafter serve to conceal the fact that the company's charges in the past have been so excessive as to yield scandalously high earnings.

The same device may be employed to conceal exorbitant charges in the present. If a company, by exploiting its customers, is clearing, say, $20,000 yearly on an investment of $100,000, its rate of profit is the very high one of 20 per cent. By issuing a stock dividend of $100,000, the capitalization is swelled to $200,000. Earnings of $20,000 look very much more respectable in relation to such a sum, for they are now only 10 per cent of the nominal capitalization! This is a clear case of stock watering. It is apparent from these considerations that the practice of issuing stock dividends is not one that should be permitted indiscriminately.

Stock of No Par Value as a Remedy for Overcapitalization.—The abuses of overcapitalization have become so serious that laws prohibiting or restricting it have been passed in many states. In some states the custom has come into rather general use of issuing stock of no par value. A corporation then has no nominal capitalization, each share of stock merely represents a certain proportion of the total net worth of the company. The actual value of the shares is determined by the price at which they are selling in the stock market. This is really what determines the value of all corporate assets and securities anyhow, the nominal capitalization being of little significance when the enterprise has once become a going concern; for investors, in buying the securities of established companies, base their judgments of value on what the companies have been earning, not on what the shares are nominally represented to be. There is therefore much reason for discarding the practice of attaching par value to shares of stock. However, if state laws are lax, stock of no par value can be used to work discrimination against the average shareholder by offering it at a low price to those who are in on the scheme while exacting a higher price from all others. In this way, the promoters or controlling officials are given an unfair claim on the company at the expense of the other security holders. So the device of no par stock gets at only part of the problem. It protects the consuming public against the concealment of extortionate rates by overcapitalization, but it does not protect the stockholders against exploitation by officials who abuse their position as active controllers of the corporation. This abuse is perhaps the most

serious problem arising out of the corporate form of business enterprise. It goes far beyond the mere matter of stock watering. We must therefore consider it more fully.

The Separation of Ownership from Control.—Under the system of capitalism, the ownership of property supposedly carries the right to control it. In the single enterpriser form of business organization, this principle is carried out; the enterpriser who owns the business is its active manager and has complete control of its policies. The same is true of the partners in a partnership. In both of these cases there is complete identity of interests between ownership and management. This is usually considered a good principle because the very institution of private property depends upon it for its justification. It has long been held by social philosophers that property is most likely to be wisely used if it is controlled by those who own it, for the owner has his wealth at stake and will be more concerned to preserve it and make it fruitful than any other person would presumably be. One writer even suggests that the golden rule of capitalism is, "Where the risk lies, there the control lies also."[2]

In the modern corporation this rule no longer prevails. The very structure of the corporation effects a considerable separation of ownership from management. To begin with, bondholders and preferred stockholders do not usually have any voice in determining the policy of the corporation into which they have put their wealth. Their interests are supposed to be protected by the fact that they have a prior claim on the earnings of the corporation before dividends can be paid to common stockholders. It is presumed that the latter, through their boards of directors and delegated officials, will conduct the corporation in such a way as to earn profits for themselves, so that returns to bondholders and preferred stockholders will be taken care of as a prerequisite to that end. However, it is not the mass of common stockholders who control the affairs of the corporation, but a small group of insiders who are in a strategic position which gives them the actual power. These insiders may consist of the leading members of the board of directors or the administrative officers of the company.

In many corporations the number of stockholders is so large, and they are so widely scattered, that it is not feasible for all of them to participate actively in the affairs of the business. A corporation may have a stockholders' list that runs not only into thousands, but even into hundreds of thousands. For instance, the American Telephone & Telegraph Company, which operates the Bell Telephone System, is owned by some 210,000 housewives, 25,000 persons in the field of management and finance, 115,000 telephone employees, 90,000 clerks and salespeople, 30,000 manual laborers, 40,000 professional and technical men, 25,000 schoolteachers, 25,000 farmers

[2] D H Robertson, *The Control of Industry* (1923), p 88

and tradesmen, 15,000 government employees, 35,000 merchants, 25,000 engaged in personal service, 21,000 retired persons, 20,000 trusteees for estates, and 5,000 corporations and private firms—this last group including 500 churches, 250 schools and colleges, 200 institutional homes, and 150 hospitals.[3] It would be manifestly impossible for all these people to come together in a stockholders' meeting; hence, the active control must rest in the hands of a relatively small group. While few corporations are as large as this one, there are many thousands which represent similar conditions on a smaller scale.

In most such cases, the bulk of the stockholders take no active part in the business of the companies of which they are nominally the owners. Even if they tried to do so, they would find in many cases that a few of the large stockholders would have the active control. Since policies are determined by majority vote and there is one vote for each share of stock, a group of insiders need control only 51 per cent of the shares in order to have the corporation completely in their hands. In practice, they do not need that much, because many stockholders are inactive and do not vote at stockholders' meetings. In most states, a majority *of those present* (either in person or by proxy) is sufficient to decide the issues that come before the meeting.

Although stockholders who cannot come to the meetings in person have the privilege of voting by proxy through someone who does attend, this is no guarantee that their interests will be represented, for it is quite common for the insiders to solicit the proxies of inactive stockholders under pretense of representing their interests, when their real motive is to gain control of enough votes to arrogate to themselves the real power. Occasionally a minority group is sufficiently strong and has the financial resources to fight the inside group successfully by soliciting proxies. Such cases are rare, however, for the costs of reaching thousands of stockholders through the mails and financing an expensive court fight are impassable barriers to all but very wealthy parties with a large interest at stake. The result is that, in the great majority of cases, the stockholders have to depend upon the good faith of the management to look after their interests.

Devices to Widen the Separation of Ownership from Control.—Not content with the separation of ownership from control inherent in the ordinary forms of corporate structure, financial schemers have developed a number of devices by which control can be further concentrated, so that the insiders can get into their hands aggregates of corporate property many times greater than any financial stake which they themselves may have put into the corporations whose affairs they direct.

[3] These figures are taken from a circular sent to its customers by the Bell Telephone Company of Pennsylvania, in August, 1934.

We have already discovered that the device of *stock watering* can be used in this way By issuing to themselves a large block of common stock for their services in launching a new enterprise, promoters may secure a preponderant vote in a corporation's affairs at its very outset, and this with a very small investment of their own—or none at all.

Another device is that of *nonvoting stock*. Under certain state laws, it is possible to issue common stock of two kinds, Class A and Class B, the former carrying no voting rights, and hence no share in the control of the enterprise. The refinancing of the Dodge Motor Company by the investment banking firm of Dillon, Read and Company of New York is the classic illustration of this procedure.[4] It is reported that the bankers bought the business of Dodge Brothers, Inc., manufacturers of automobiles, for $146,000,000. This sum they sought to recover with a profit by the sale to the public at par of bonds and preferred stock totaling $160,000,000, and also nonvoting shares of Class A common stock amounting to $1,500,[illegible] At the same time, there were issued 500,000 shares of Class B common stock, of no par value, which carried the voting privilege, but this was not sold to the public, being retained instead by the bankers. By this amazing transaction, the banking house bought the business, sold it at a handsome profit, and yet retained full control!

The device of *multiple voting stock* is somewhat similar. It consists of the issuing of two or more classes of shares, some of which carry more voting rights than the others. Cities Service Company, for example, sold [illegible] shares of $1 par preferred stock to H. L. Doherty & Company in 1929.[5] Each share of this stock entitled the owner to one vote in the election of directors, but the common stock, which was held by the general public, gave the right to only one-twentieth of a vote per share.

Where nonvoting stock is used, those in control are at least part owners as holders of the voting shares; but there is another device in which the separation of control from ownership is complete This is the *voting trust*, in which trustees hold the voting stock, giving the stockholders trust certificates in exchange. Formerly illegal, this has been legalized by changes in state corporation laws. In some cases it serves the useful purpose of giving minority stockholders a share in control by pooling their holdings in a board of trustees to represent their interests; but it can be abused.

Finally, there is a kind of corporation known as a *holding company* which is formed, not to produce goods or operate an industrial plant, but merely to secure a controlling interest in one or more other corporations. Sometimes the stockholders in the companies to be controlled are induced to trade their shares directly for the stock of the holding company, in the

[4] W Z Ripley, *Main Street and Wall Street* (1927), pp 86 87

[5] A A Berle and G C Means, *The Modern Corporation and Private Property* [illegible]

expectation that unified management of their several concerns by the parent company will result in improved efficiency (or in monopoly profits) that will increase their dividends. But it is not necessary that the stockholders in the subsidiary corporations consent to or even have knowledge of what is going on. Funds secured by the sale of stock of the holding company can be used by its promoters to buy in the open market enough shares in companies they desire to control to accomplish that purpose. The rest of the stockholders are virtually disfranchised.

Often one holding company is "pyramided" on top of another. One need hold only slightly more than 50 per cent of the stock in a holding company to dictate the policy of all the subsidiary companies which are controlled by it. Suppose that a holding company is formed to buy a controlling interest in three subsidiary corporations whose outstanding common stock aggregates $300,000. Assuming that this stock is selling at par in the stock market, the holding company will need about $151,000 to purchase a controlling interest in the three companies. The promoters of the holding company need own only half of the common stock of the latter, or a little more than $75,000 worth. Now suppose that a second holding company is organized to purchase a controlling interest in the first. It need be capitalized at only $76,000, and half of this sum will suffice to control it. We then have the owners of $38,000 in the second holding company controlling the property of the three original subsidiaries, amounting to $300,000. It is a case of a very small tail wagging a very large dog. This could be repeated until several more holding companies were piled upon these. It was in this way that the Van Sweringen Brothers, in the 1920's, with an investment of less than $20,000,000, gained control over Class I railroads possessing assets of over $2,000,000,000.[6] The same sort of thing has been accomplished many times over in American financial history.

Misuse of the Power of Control.—This separation of ownership from control violates the golden rule of capitalism. It leaves the owners who have the largest financial stake in the corporation with nothing to protect their interests except the good faith of the managing officials. This would not constitute a serious problem if the interests of the management and the stockholders were identical, but they are not. There are various ways in which the managers can exploit their position to enrich themselves at the expense of the stockholders. It takes a strong sense of justice and unselfishness for the controlling officials not to take advantage of these opportunities. If they have managed the affairs of the corporation successfully, so that it is making good profits, they may feel (sometimes with justice) that it is their ability and enterprise which have brought the gains and that they, therefore, rather than the stockholders, should reap the major benefits. The stock-

[6] Berle and Means, *op. cit.*, pp. 73-74.

holders and bondholders should be satisfied with a modest return of interest on their investment. So, the company's business will be manipulated in such a way as to divert most of the gains into the pockets of those who are in control, and the less highly developed the ethical standards of these men the further they will go in that direction.

There are various ways in which the earnings of the business can be diverted to the pockets of the managers. They can appoint themselves and their friends to lucrative offices in the company, perhaps at salaries so [illegible] to absorb all the earnings and leave no profits to be paid out in [illegible]. Or, if profits are exceptionally good in any particular year, they may [illegible] the directors to vote them a bonus as a reward for their real [illegible] efficiency. There are numerous cases where the combined salar[illegible] bonuses of particular officers in large corporations exceed $100,000, running in some cases to more than a million dollars. Another fav[illegible] is to organize collateral companies, which are owned by those in control, [illegible] sell raw materials or equipment to the primary corporation. For instance, the officers of a certain automobile manufacturing company organized [illegible] other company to sell radiators to the first concern. They charged [illegible] exorbitant a price for the radiators that the cost of manufacturing [illegible] was too high for the automobile concern to prosper. The latter could [illegible] bought radiators more cheaply elsewhere, but since its officers were [illegible] as those of the radiator concern, they used their power of control [illegible] the latter. In this way they received good profits on their r[illegible] expense of the stockholders in the automobile company. There are va[illegible] possibilities of intercorporate relations similar to this which a[illegible] divert profits from stockholders to those in positions of control.

Another device that accomplishes the same result is the p[illegible] In this case, the corporation has two classes of common stock: Class A, [illegible] is entitled to two-thirds of the net earnings, and Class B, which [illegible] one-third. Only Class A stock will be sold to the general public, Clas[illegible] stock being held primarily by the insiders. Let us suppose that such a [illegible]poration at the time of promotion has $300,000 of paid-in capital, of w[illegible] $200,000 is represented by A stock and $100,000 by B. In this case, th[illegible] holders have put up one-third of the capital, and it is not inequitabl[illegible] them to receive one-third of the earnings. However, when the business [illegible] become established and needs more capital for expansion, this will be ob-tained by the sale of, say, another $100,000 of Class A stock to the investing public. Class A holdings will now amount to $300,000, but Class B holdings will be no larger than before. Yet the owners of the B stock will continue to receive one-third of the profits, although three-fourths of the capital [illegible] been supplied by the other stockholders.

These examples by no means exhaust the list. The affairs of the corp[illegible]tion can be so manipulated as to make it appear to be losing money.

uninformed stockholders are frightened into selling their shares at sacrifice prices. The managing officers can then buy up this stock at less than its true worth, and thereafter conduct the corporation so as to make profits, until the stock has increased in value to the point where they can resell it at a handsome gain. In extreme cases corporations may be deliberately wrecked and thrown into bankruptcy so that an inside group may buy up the enterprise at bargain rates.

It must not be inferred that all corporations have been characterized by these various abuses. Many corporations are ethically organized and honestly managed, with due regard for the interests of all the investors. The officials at the heads of such corporations are honorable men who perform their duties with a high sense of responsibility to their stockholders. Nevertheless, the evils described are sufficiently widespread to constitute a social problem of serious concern.

The Prevention of Corporate Abuses.—It would be unjust to punish the good corporations for the sins of the bad ones by abolishing the corporate form of business altogether. Besides, the corporate form is the only one that is satisfactory for carrying on the large-scale enterprises which are characteristic of modern industry. Its features of large membership, delegated management, transferability of shares, and long life, make it possible to gather into one business organization the large aggregations of capital which are essential to efficient production in this age of mechanical processes. What is needed is a program of control by which the disadvantages of the corporation can be eliminated or reduced, while the advantages are retained. A number of measures have been suggested which lead in this direction.

One is that all corporations doing an interstate business be required to obtain a federal charter. At the present time, a corporation can obtain a charter from any state that it chooses and do business in any or all of the other states. This creates competition among the states to attract charter-granting business for the sake of the revenue derived from incorporation fees. Some states have been thus led to make the requirements for incorporation very lax, and other states have hesitated to make their requirements more exacting for fear of losing business to the lenient states. It is thought that federal charters could be surrounded by such conditions with respect to capital structure that the interests of the stockholders would be adequately protected.

Whether through federal incorporation or otherwise, the law should provide that all corporate securities, except bonds or other evidences of debt, should carry voting rights. Nonvoting stock, multiple voting stock, the voting trust and similar devices should be prohibited. The financial structure of the corporation should be simplified by restricting security issues to a small number of types. It would seem that the three classes—bonds, preferred stock and common stock—would supply sufficient diversity to meet the needs of different classes of investors.

It would probably be wise to pass legislation requiring uniform accounting methods for all corporations, so that the accounts would reveal clearly the exact financial status of the business, instead of concealing important information, as is sometimes the case under existing practices.

The law should direct that all directors and managing officials of corporations should be considered as serving in positions of trust for the stockholders. This would place these officials before the courts as trustees, which they should be, because they are in truth assuming responsibility for management of the property of other persons. They would then be held strictly accountable for their acts, and would be subject to criminal prosecution if they took advantage of their positions to enrich themselves at the expense of the investors whose interests they are presumed to serve.

These measures should go far toward restoring the connection between the ownership and control of property, and thereby bring the golden rule of capitalism back into play. If every share of stock received voting rights in proportion to the investment actually made, if every investor had a clear understanding of the place which the security he held had in the corporate structure, and finally, if every director and official understood clearly that the courts considered him a trustee acting in the stockholders' interests, then a marked change would be noticeable in the behavior of the insiders who actually control a corporate enterprise.

Finally, the use of the holding company should be drastically limited, if not prohibited altogether. Where genuine gains in efficiency can be achieved by bringing several businesses under one management, a merger of the companies into a single new corporation will usually accomplish the end desired without the surrender of control to financial schemers that so often accompanies the formation of holding companies.

Some of these reforms have been partly achieved through the regulatory activities of the Securities and Exchange Commission. It can and does compel those corporations which put out new securities in amounts of $300,000 or more to file with it registration statements, giving sufficient information to reveal clearly the status of their businesses, including information calculated to reveal any misuse of their positions by corporate officers at the expense of stockholders. For instance, salaries and bonuses paid to corporate officials are regularly reported to the commission and made public by it, thus giving stockholders an opportunity to protest to the directors if they regard such salaries as encroaching upon their dividends. Corporate directors, officers, and stockholders who own 10 per cent or more of any issue of securities in their own companies, must report these holdings to the commission, and they must also report monthly their purchases and sales of such securities. They are not allowed to circulate misleading information to depress or raise the prices of securities, and they are subject to penalties if they violate this rule. If they make profits from dealing in the securities

of their own corporations within any period of six months, these profits belong to the corporation, not to the individuals. There are other regulations similarly designed to prevent corporate officials from taking advantage of their stockholders. The commission also has been empowered to break up some of the top-heavy holding company structures in the public utilities industries.[7] While these regulations do not accomplish all of the reforms suggested, they constitute important steps in the right direction, and are helping to reduce the evils which have hitherto been so widespread in American corporations.

Unfortunately, the provisions of the Securities Exchange Act requiring registration statements and the publication of full and accurate information by corporations offering securities for sale do not apply to security issues amounting to less than $300,000 each. The result is that many issues of securities escape these requirements, and there is still opportunity for corporate officials to abuse the rights of stockholders in these cases. While the powers of the SEC are sufficient to enable it to act for the protection of investors wherever abusive practices are uncovered, such cases are not likely to come to its attention unless some stockholder is suspicious enough to register a complaint with the commission. Often the stockholders are mulcted without their knowing enough about it to make a protest. There is needed, therefore, additional legislation to extend to smaller security issues the requirements concerning registration statements and adequate reporting of relevant facts. The commission itself has called attention to this need and has asked Congress to amend the law so as to require registration for all corporations having at least $3,000,000 in assets and at least 300 security holders. It is doubtful if even this would be sufficient. It would be better to extend the requirements to all companies engaged in interstate commerce which have $300,000 or more of assets and 50 or more stockholders.

Summary

The market for corporate securities is organized through the medium of promoters, investment banks, and stock exchanges. Promoters seek opportunities for new enterprises, obtain charters, sell the new securities to investment bankers or to the investing public, and get under way the business of the corporations they start. Investment banks are firms that assist corporations to obtain long-time capital funds by underwriting their security issues. They buy whole issues of stocks and bonds from corporations and sell them to individual investors who are their clients. They also act as brokers for the buying and selling of old securities, either through the organized stock exchanges or through "over-the-counter" sales. They act as advisers to both corporate officers and investors in matters concerning the

[7] This matter is dealt with more fully in Chapter V

issuing of or investment in securities. Stock exchanges are organized institutions whose members are brokers and traders who deal in certain listed stocks and bonds. They are primarily markets for speculation in these securities. This speculation performs three useful functions, namely. the maintenance of a continuous market for stocks and bonds, the guiding of new capital into the most productive fields, and the discounting of future business conditions. However, this speculation is accompanied by the undesirable practices of margin trading, manipulation of prices, and gambling transactions, all of which have been inadequately regulated by the exchanges.

State "blue sky" laws are designed to protect investors against the sale of fraudulent securities, but they have not been very effective. Hence, the federal government now regulates securities selling in interstate commerce and through the mails by compelling corporations to file detailed registration statements with the Securities and Exchange Commission, before their securities can be offered for sale to the public. Corporate officials are held responsible for the accuracy of these statements. The Securities and Exchange Commission also has power to regulate stock exchanges and to prevent manipulation of security prices therein.

The par value of a corporation's securities may be less or more than the amount of money actually invested in the business. These two conditions are known as undercapitalization and overcapitalization, respectively. If the overissuing of securities has been deliberate, it is called stock watering. Stock watering is used to give promoters a share in voting control and in profits without commensurate investment of funds, or to attract investors by offering a bonus of free stock with each share they purchase, or to conceal a high rate of profits. The payment of stock dividends does not constitute stock watering if there has been a corresponding reinvestment of earnings in extensions to the company's plant, but it may help to conceal excessive earnings. The issuing of stock without par value has been used in some states as a preventive of overcapitalization, but it is subject to the abuse of being sold at lower prices to insiders than to the general public.

Although the ownership of private property in the capitalistic system is supposed to be linked with control, this rule is frequently departed from in the financial practices of corporations. Only common stockholders have a vote in the control of policy, and ownership of 51 per cent of the stock is sufficient to obtain complete control of a corporation. Where there are many scattered stockholders, most of whom are inactive, a small group of insiders can control a corporation even though they own less than half of the stock. Proxy voting contributes to this end. Various devices are used to widen the separation of ownership from control. These include stock watering, nonvoting stock, multiple voting stock, the voting trust, and the holding company. When a small group of insiders thus secures control over a large amount of property which they do not own, they frequently abuse their

power by handling the affairs of the corporation so as to divert profits into their own pockets, with consequent loss of dividends to stockholders. This is accomplished by appointing themselves to positions at high salaries, by the payment of bonuses, by organizing collateral companies which sell goods at high prices to the parent company, by the use of parasite shares of stock, and by other means. The prevention of these abuses calls for such measures of control as federal incorporation, restriction of security issues to bonds, preferred stock and common stock, uniform systems of accounting, the placing of corporate officials in the legal position of responsible trustees, and the curbing of holding companies. Federal regulation by the Securities and Exchange Commission is accomplishing some, but not all, of these measures.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

Comprehensive factual descriptions of the organization and operation of the security markets are to be found in C. A. Dice and W. J. Eiteman, *The Stock Market* (1941), and Solomon S. Huebner, *The Stock Market* (revised edition, 1934). For a more advanced text on the mechanics of exchange procedure and the technical aspects of the securities business, see Birl E. Shultz, *The Securities Market and How It Works* (1942). John T. Flynn presents an elaborate indictment, exposing the abuses of the stock market, in his *Security Speculation, Its Economic Effects* (1934), but the book is journalistic rather than scholarly. The findings and recommendations of a staff of specialists who investigated this problem for the Twentieth Century Fund are given in Alfred L. Bernheim *et al.*, *The Security Markets* (1935). Willard E. Atkins, George W. Edwards, and Harold G. Moulton digest the various laws regulating the security business, and discuss carefully their background and administration, in *The Regulation of the Security Markets* (1946). The organization and work of the SEC is briefly described in a pamphlet, published by that commission, entitled *The Work of the Securities and Exchange Commission* (1941).

There are a number of texts that describe the technicalities of corporation finance in considerable detail. Among these are A. S. Dewing, *The Financial Policy of Corporations* (fourth edition, 1941); C. W. Gerstenberg, *Financial Organization and Management of Business* (second revised edition, 1940); H. G. Guthmann and H. E. Dougall, *Corporate Financial Policy* (1940); and E. S. Mead, D. B. Jeremiah, and W. E. Warrington, *The Business Corporation: Its Financial Organization and Operation* (1941). These works treat their subject from the point of view of the businessman; they are not much concerned with the broad social effects of corporate activities. On the other hand, F. F. Burtchett's *Corporation Finance* (1934) emphasizes the social function and responsibility of corporations and the problems which arise therefrom.

An interestingly written book, which early called attention to the dangers inherent in the trend toward the separation of control from owenrship in industry, is William Z. Ripley's *Main Street and Wall Street* (1927); but by far the most important study of this problem is *The Modern Corporation and Private Property* (1932) by A. A. Berle and G. C. Means. This has become a classic to which all subsequent writers on this topic are indebted. Very different from any of the above is N. S. Buchanan's *The Economics of Corporate Enterprise* (1940), which deals with the theoretical aspects of corporate activities.

The agencies of regulation consist of national or state public utilities commissions, of which the Interstate Commerce Commission is the best-known example. A chief function of the commissions is to regulate rates so that they will be fair to the consuming public, while yielding a fair return to the corporation on the fair value of its property. The determination of fair return and fair value, and the working out of equitable rate structures, involve difficult and controversial problems The controversy over railroad rate conferences suggests that the machinery of rate regulation may not always be a certain protection against monopolistic prices Commissions also control the methods of accounting used by public service corporations, in order that the former may be able to ascertain accurately the costs on which rates are based They also have power to see that the corporations render adequate and safe service to the public A problem of particular importance in the regulation of transportation industries requires the consolidation of railroads into a number of integrated systems, and better coordination of railroad, water, air, and motor transportation agencies A recent development has been federal regulation, by the Federal Power Commission, of the interstate generation and transmission of electric power The top heavy holding company structures that hitherto prevailed in the public utilities field are being broken up into physically integrated systems, with a maximum of two degrees of holding companies, under supervision of the Securities and Exchange Commission.

The increasing participation of government in the affairs of regulated companies has led to some agitation for complete public ownership and operation of public utilities Precedents for this are found in municipally owned utilities plants, and in such national public enterprises as the Post Office and the Tennessee Valley Authority. In other countries public enterprise is more extensively developed, including a number of national railway systems, the extension of socialism in Great Britain, and the collective system of the U.S.S.R. The Tennessee Valley Authority in this country represents a significant extension of federal governmental activities into a general system of regional planning In favor of government ownership, it is argued that it will reduce costs and give better service to the public On the other side, it is argued that it is likely to involve waste and inefficiency because of political corruption and laxity. Experience with public ownership is inconclusive because there are numerous examples of both successful and unsuccessful cases. The use of the corporate form by public enterprises offers some possibility for greater freedom from political interference. Man's increasing control over his social environment leads logically to the further extension of public regulation and ownership.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

The following general texts deal comprehensively with most of the topics included in this chapter. Irston R. Barnes, *The Economics of Public Utility Regulation* (1942)—does not deal with transportation; Martin G Glaeser, *Outline of Public Utility Economics* (1922); Ford P. Hall, *Government and Business* (second edition, 1939)—deals broadly with the control of business in general; Eliot Jones and Truman C. Bigham, *Principles of Public Utilities* (1931); C. Woody Thompson and Wendell R. Smith, *Public Utilities Economics* (1941)—an excellent general text with a good chapter on the TVA; and two volumes by G Lloyd Wilson, James M. Herring, and Roland B Eutsler, entitled *Public Utility Industries* (1936), and *Public Utility Regulation* (1938).

In the field of transportation, D. Philip Locklin's *Economics of Transportation* (revised edition, 1938) is outstanding James C. Bonbright, in his *Public Utilities and the National Power Policies* (1940) discusses briefly and sympathetically the development of federal power projects. On this last subject see also the Twentieth Century Fund's study entitled *The Power Industry and the Public Interest,* a summary of the results of the survey of the relations between the government and the electric power industry, edited by E. E Hunt (1944).

The alleged monopolistic abuses now prevailing in the transportation industry with ICC approval are roundly attacked by Arne Wiprud in his *Justice in Transportation* (1945) The other side of the controversy is more temperately presented by Charles D Drayton in *Transportation Under Two Masters* (1946)

Chapters on public ownership are to be found in the general texts cited above A special study in this field is Carl D Thompson s *Public Ownership* (1925) Since Mr. Thompson speaks for the Public Ownership League of America, his survey of the various experiments with public ownership here and abroad amounts to a defense of it

Broader than any of these are the following J M. Clark, *The Social Control of Business* (second edition, 1926); this is a thoughtful and stimulating analysis of the institutional background of regulation and of some of the economic problems associated therewith Seba Eldridge and associates, *The Development of Collective Enterprise, Dynamics of an Emergent Economy* (1943); this is a series of studies by different writers dealing with the way in which increasing social control and ownership have developed in various parts of our economy, and the social implications of this evolution Dexter M. Keezer and Stacy May, in *The Public Control of Business* (1930), after a survey of American policy in attempting to break up monopolies and regulate the utilities, conclude that both have been ineffective; therefore, they advocate government enterprises operated in competition with private businesses.

CHAPTER VI

Efficiency in Marketing

A. The Structure and Process of Marketing

The Nature of Marketing.—When each individual or each small community produces for itself most of the goods which it requires, there is little need for trade; but when specialization develops, trade becomes extensive. When each person works on only one product, and when whole communities depend for their livelihood on one or a few industries, they must obtain the many other products which they need through a process of exchange. So the volume of trade grows as specialization becomes more complex. With this growth of trade, there must be a marketing organization to carry it on. Marketing specialists come into existence to perform the function of linking together the various parts of the economy. This linkage is a very real part of the productive process. The act of changing raw materials into semi-finished goods, and semi-finished goods into consumable products, is not the whole of production, but only a part of it. It is not enough to give goods the proper form—they must also be brought to the place where they are to be used, made available at the appropriate time, and put into the possession of the persons who desire them. It is the function of the marketing organization to do these three things. Therefore marketing may be defined as *the creation of place, time, and possession utilities.*

Consider the production of bread. First the farmer grows wheat, thereby creating a form utility. Then various marketing firms (wheat dealers or brokers, shippers, transporters, grain storers, etc.) transfer the wheat to the miller, creating place, time and possession utilities. The miller now grinds the wheat into flour, again creating form utility. Then the marketing organization steps in a second time, the miller's flour being transferred to the baker by another series of marketing agencies. The baker completes the form utility by making the flour into bread; but the process is not yet finished, for another marketing specialist (the retail grocer) must perform the final task of getting the bread into the hands of the housewife. All the individuals or firms who do this work of marketing are known as middlemen, because their position in the chain of productive processes is somewhere between the producers of form utilities and the final consumers.

Our present task is to understand the nature of this marketing organiza-

tion, to appraise the efficiency of its operation, and, where necessary, to suggest measures to improve it.

The Functions of Marketing.—The services performed by the marketing organization are many and very diverse. Its broad function is to coordinate the demands of consumers, on the one hand, with the supply of form utilities available to satisfy those demands, on the other. The desires of consumers for goods, however, are numerous and complex, while each producer possesses limited resources of a special character. Consequently, there must be many stages between the two extremes—the beginning and the end of the productive process. "Wholesale traders get their supplies from a higher stratum of traders; each of whom specializes on a narrow range of goods but keeps in stock a large variety within that range."[1] The closer the middleman is to the ultimate consumer, the more diverse the stock he must carry; while the closer the middleman is to the farmer, miner, or manufacturer, the more specialized and restricted in scope must be his stocks. Thus the retailer who operates a country store, or its city counterpart the department store, seeks to carry everything the shopper might need; while the man who purchases wheat from the western farmer to sell to the miller of flour, is a dealer solely in wheat.

In the narrower or more specific sense, the functions of marketing are, chiefly, the assembling, grading, sorting, transporting, financing, and selling of goods, and assuming risks in connection therewith.[2] For example, the wheat crop, produced by numerous independent farmers, must be assembled at central points and must be sorted and graded in a uniform manner. It must then be shipped to trading centers and thence to the miller. Flour must be shipped from the miller to the baker. At each step the middlemen involved assume ownership of the product and consequently must "carry" or finance production, as well as assume the risk of price changes, while the commodity is in their possession. Finally, contacts with prospective purchasers must be established, so that when the time is ripe the holdings, whether wheat, flour, or bread, can be disposed of profitably.

Middlemen and Marketing Functions.—It can readily be seen that the functions of marketing just described are essential to the efficiency of production. These functions cannot be eliminated without serious loss and inefficiency resulting. Individual middlemen, however, can be eliminated. Every move towards the integration of industry removes independent middlemen formerly serving as connecting links between the stages of production, but this is the equivalent of stating that the new organization has taken over the functions formerly conducted by independent middlemen. Farmers may combine and market their wheat, without the assistance of middlemen,

[1] Alfred Marshall, *Industry and Trade* (1919), p 278

[2] Paul W Ivey, *Principles of Marketing Organization* (1921), pp 6 and 7

through a cooperative organization of their own; but this means that they have themselves assumed the task of doing what the marketing specialists formerly did. The desirability of such an integration of functions can be estimated only by a careful analysis of the advantages and disadvantages of the farmers spreading their limited resources over an increasing number of functions, rather than concentrating their means and abilities on their basic occupation of farming.

Specialization in Marketing.—Economists have long recognized the efficiency of specialization in the manufacture of goods. There is no reason why a method that is found effective in other lines of activity should prove ineffective in marketing. Specialization among middlemen has developed along much the same lines, and for much the same reasons, that it has developed in other phases of productive activity. Middlemen may specialize by trades or commodities (simple division of labor), and by tasks or functions (complex division of labor). Food products furnish an excellent illustration. At country shipping points there are various dealers specializing in grains, live stock, fruits, butter, and similar products. At these centers, too, are located warehouses which specialize in certain commodities, such as potatoes or one of the grains. In the wholesale trade each firm usually specializes in one product or a closely related group of products, such as vegetables and fruits, or butter, eggs, and poultry. Even retailers specialize on a commodity basis. We have the grocery store, the butcher shop, the fruit stand, and the bakery. Viewed functionally, specialization of marketing includes country assembling and shipping points, transportation companies, wholesale dealers, retail stores, and financial institutions.

The degree of specialization in marketing depends somewhat on the nature of the product and the size of the shipping or distribution point. In New York City the specialization is far more developed and contains more steps than one finds in a smaller city. As long as this specialization is the result of a need and survives on a competitive basis, it should add to the efficiency of marketing, just as the extension of the same principle has made possible such institutions as the Ford motorcar plant and the meat-packing organizations.

The various types of specialized marketing organizations can be broadly classified into wholesalers and retailers. We shall consider each of these classes somewhat more fully.

The Wholesaler.—The primary function of the wholesaler is to form the connecting link between those who create form utility and their respective markets. It would be impossible for each farmer to establish individual connections with the numerous millers who constitute his ultimate market. Likewise the miller, unless he operates on a very large scale, would find difficulty in making individual contacts with every prospective purchaser of his finished product—flour. For every farmer and miller to develop his own

marketing organization would be, if not impossible, at least an example of sheer economic waste, both in its failure to utilize the benefits of specialization and in the duplication of effort involved. The wholesaler developed in response to a real economic need. The farmer can dispose of a part of his crop by direct sale to the local store, through the mail, or by calling directly at the homes of persons living in his vicinity; but the bulk of his surplus output is destined for consumption in the great urban centers of the nation, and to reach that great market the services of the wholesaler must be called upon. Local buyers or shippers purchase products from the farmers, gather them into full carloads, and ship to the central market. These dealers maintain, or have contacts with, the agencies necessary for storing and grading the product. They give the farmer immediate cash for his crop; and by use of their specialized knowledge as to market conditions they establish connections with the middlemen who carry on the next step in the marketing process.

In farm products the destination of the local buyer's shipment is often one of the large organized product markets. In the case of wheat, the grain is placed in a large warehouse, called an elevator, and the grain dealer is given a receipt, stating the amount and grade of the grain deposited. The dealer seeks to sell this receipt at a favorable time and at an advantageous price, through the medium of an organized produce exchange. Usually the dealer has connections with another middleman called a broker, who buys and sells on the floor of the exchange at the order of other persons. This process will be given a little more in detail in a later paragraph. The local buyer is connected with the individuals who desire wheat, primarily millers in the business of producing flour. While the miller is changing the wheat into flour, he himself must bear the financial burden; that is, he must "carry" the process. The transfer of the finished product (flour in our illustration) to the retailer frequently brings into operation another group of wholesalers known as jobbers. A jobber is a man who deals in job lots; that is, he buys in large quantities and distributes to retailers in small quantities as they desire it. The number of jobbing stages varies for different products. However, in every case the raw material must be brought to the manufacturer, and the manufacturer must be connected with the retailer. Each product brings into existence various strata of wholesalers adapted to its own marketing needs

While we have here used wheat for our illustration, the same type of organization exists, with appropriate modifications, for the marketing of other staple farm products. For other commodities, such as hardware, shoes, clothing, electrical goods, or furniture, the wholesale organization differs more markedly. The lack of standardization and uniformity of these products makes impossible the use of such organized markets as the produce exchanges.

The Retailer.—The marketing specialist with whom the consuming public comes in contact is the retailer. It would be impossible for every con-

sumer to deal directly with the producers of the commodities and services he requires to satisfy his wants. Desires for various kinds of food, clothing, shelter, and luxuries are of a very wide variety. Consumers demand immediate delivery in small quantities of each good as the need for it arises. The primary functions of the retailer, consequently, are the making of a careful study of the desires of consumers, the development of contacts with producers of goods satisfying those desires, and the maintenance of a stock so that immediate delivery is possible. The secondary functions of a retailer are those activities popularly called service. The retailer often grants the purchaser short-time credit Sometimes he delivers goods direct to the purchaser's doorstep Often he maintains a service department that is charged with the duty of keeping in repair and working order commodities requiring such attention Many of the larger retailers provide rest rooms, restaurants, and similar facilities for the convenience of their patrons. The relationship of the retailer to the consumer is distinctly personal.

Types of Retailers.—Before the present era of highly developed specialization the *general store* was the chief avenue through which commodities found their way into the hands of the ultimate consumer. These stores strove to supply practically every need of the consumer. Food, clothing, and luxuries of almost every description were kept in stock. Every store operated as an independent unit and secured its stock by purchasing through salesmen or catalogues from wholesale houses. While the number of commodities handled was wide, the variety of each type held in stock was necessarily narrow.

The general store still survives in many rural sections of the United States but, with the growth of population and the development of urban centers, the enlargement of the local markets resulted inevitably in the specialized type of retail store. Thus we have the grocery store, fruit and vegetable store, meat market, tobacco store, shoe store, and similar establishments. These *specialty stores* have the advantage of carrying a wide variety of goods of their particular kind, and yet they have a volume of sales sufficient to make it profitable to carry a heavy inventory of the specialties. Their disadvantage rests in the difficulty of obtaining sufficient custom for their specialty to make the enterprises paying propositions.

The trend towards specialized shops led logically to the *chain store* organization to secure the economies of a larger scale of operations. Chains such as the United Cigar Stores, The Great A & P Co, and Woolworth Five and Ten Cent Stores, place under a single management branch stores all over a large city and in different cities Chain organizations can secure trade discounts by buying in large quantities. High grade executives can be employed for advertising, purchasing, and other special managerial duties. Stock unsold in one store can be shipped into another, reducing inventory losses Advertising can be placed on a large-scale basis. And many of the functions performed by independent middlemen can be taken over. There are other

advantages not so meritorious from the social point of view, such as the ability to drive out a local competitor in one locality by underselling him and making up the difference in other stores, where the competition is not so acute. Often chain stores are started by manufacturers for the purpose of establishing direct sales contact with customers The chief drawback has been the difficulty of getting hired managers to develop an interest in the business comparable to that which a small enterpriser puts in his own business. A man working for himself is usually a better workman than a man of equal ability acting as the hired agent of someone else.

One of the most interesting of all developments of retail selling in the larger cities is the *department store*. A department store is really a group of specialty stores under one roof, managed by a single firm. To consumers it furnishes a place where most of the commodities they need can be purchased without the necessity of shopping from store to store. To manufacturers, the department store furnishes a large market for the disposition of their output. The strength of such establishments rests in their ability to utilize large scale methods of operation, and the chief weakness rests in the difficulty of acquiring efficient managers and sales persons.

The department store has its present day counterpart in rural communities in the *mail-order house* These institutions, such as Sears, Roebuck and Company, and Montgomery Ward and Company, offer a wide variety of choice, reasonable prices, good service, and up to date merchandise, to consumers who are very much limited in their ability to reach the well-equipped shops of the city. Manufacturers often deal directly with mail-order houses handling large quantities of goods and, as in the department and chain store, the necessity for independent middlemen is much reduced. The efficiency of the parcel post mail service has been largely responsible for the success of the mail order concerns Their most serious difficulty is the lack of personal contact All the human elements brought so forcefully into play by the local merchants in dealing with their individual customers are lost completely to the mail-order house.

Perhaps the most significant recent development in retailing is the *super-market,* now so familiar to every housewife. This new type of store is one evidence of the profound effect which the automobile has had upon the marketing organization It is a large establishment dealing in foods or other household goods, and provided with adequate parking space for many automobiles Its several departments may be operated by the owners, or some of them may be leased to concessionaires Originated on the Pacific Coast in the early 1930's, these markets have since spread over the entire country, until now their numbers run to several thousand. The first super-markets sold primarily packaged groceries, but the success of the idea resulted in a gradual increase in the variety of stock until it approached that of a department store Hardware, magazines, wines and liquors, drugs, and even dry goods, china-

ware and automobile accessories, are sold in new departments. Usually the stores operate on a self-service and "cash and carry" basis. The advantages gained are reduced overhead for clerks, low rents (because high-rent districts are avoided), elimination of bad credit risks, elimination of delivery costs, and the many economies of buying and selling that go with a very large turnover of merchandise. The housewife likes the convenience of purchasing a variety of goods under one roof, and her purchases make the average sales slip fairly large.

Government Defense of the Small Retailer.—The early depression years of the 1930's brought a sharp increase in the number of bankruptcies among independent retailers. The falling volume of sales naturally hit hardest upon the less ably managed and financially weak small dealer, but the blame was placed upon the growth of mass distribution by chain stores, super-markets, and the great mail order houses. To meet the new threat, the independent merchant concentrated his complaints upon two charges (1) that the firm engaged in mass distribution received unwarranted discounts and rebates because of the strength of his bargaining power; and (2) that the standard brands of the independents were used by the large competitors as "loss leaders" which ruined the business of the little fellows—that is, the mass distributor would attract customers by selling certain trade-marked goods at less than cost, recouping this loss by gains from the sale of its own well-advertised brands. The small independent retailer could not meet this competition.

Protection of the independent local merchant first took the form of special taxation against the chain store; about half the states have some form of chain-store taxation. The tax per store increases progressively with the number of stores in the chain. Although a state can tax only the stores located within it, the rate of tax is usually based on the total number of stores in the organization, including those in other states; it is thus a tax based on the size of the business as a whole. Court decisions in cases brought to test the legality of this principle have been divided, but the idea of a tax based upon the length of the chain has been sustained.

The Robinson-Patman Act, passed in 1936, forbids price discrimination in interstate commerce where the effect is to lessen competition or to encourage monopoly It permits special discounts to large purchasers only to the extent that there is an actual saving in costs on such sales. This law was preceded and followed by a wave of similar state "unfair trade practice" laws, some of which go so far as to prohibit sales below cost in the distributive field. Organized groups of independents bring prosecutions to enforce these prohibitions.

The Miller-Tydings Act of 1937 sanctioned contracts between the manufacturers of patented or trade-marked goods and retail dealers, in which the retail price of the goods is fixed. State "retail price maintenance" laws, patterned after this federal statute, have since become general. These laws pro-

tect the manufacturer by giving him control over the final selling price of his product, and they protect the small retailer against price-cutting by his large competitors. It was pressure from the latter for this second protection that caused these laws to be enacted. The net effect is to restrain competition.

What is the social interest in this trend toward increasing defense of the independent merchant by government intervention? Complaints against the mass distributors are usually phrased as protests against the rise of monopoly power in marketing, and demands for protective action assume an antitrust dress. Nevertheless, the real motive back of this legislation is not to prevent monopoly, but to protect it. The small, independent merchant, operating in a village, a town, or a city neighborhood, has been accustomed to a slight monopolistic advantage in his limited area—it is a perfect example of the theory of monopolistic competition. The entrance of the mass retailer, especially the chain store and the super-market, created more nearly competitive conditions, to the great advantage of many small communities and consumers with low incomes. Vigorous competition forced down retail prices. Since the small retailer is notoriously inefficient and operates on very limited capital, the result of the new competition in making his position difficult is not surprising. Impartial study of the evidence shows clearly that competition has increased and the efficiency of distribution has been improved by mass selling. But there are broader social and political issues involved. The small enterpriser and the farmer are said to give a firm basis to political democracy and to constitute an important facet of the social pattern. Perhaps we should protect them enough to insure their survival on these grounds. However, since it is clear that mass distribution must come for the same economic reasons that brought about mass production (namely, because it is more efficient) our policy should be directed towards elimination of the abuses of power by the big concerns, rather than to attack them merely on the basis of their size. Our primary economic objective in marketing should be to obtain lower prices and wider variety for the consuming public. We shall return to this topic in Chapter XX, when certain issues of price control will engage our attention.

B. Speculation and Organized Commodity Markets

Organized Commodity Exchanges.—One of the most important steps in the marketing process is the buying and selling of commodities on the floor of organized exchanges. Such markets provide a central point for dealing in: (1) food products such as wheat, corn, oats, rye, barley, coffee, and sugar; and (2) raw materials such as rubber, silk, hides, and certain metals. The greatest and best-known produce (foodstuffs) exchange in the United States is the Chicago Board of Trade. The Commodity Exchange, Incorporated, of New York, is the primary raw material exchange. Established in 1933, it consolidated a number of independent organizations, such as the National Metals

Exchange and the New York Hide Exchange. The members of these organizations may be brokers who act as agents for other persons on commission, or they may be dealers or speculators, buying and selling for their own account, and frequently having no interest in the commodity dealt in other than making a profit through anticipating price changes. Business on the floor of the exchange is conducted under a strict set of rules, some written and others merely conventional, but all equally binding. Transactions are either spot sales or futures sales. A spot sale calls for immediate or early delivery of the product sold, while a futures sale calls for delivery at some stated future date. Transactions in the spot market are usually made on the basis of samples which are displayed on tables on the floor of the exchange. The exchange furnishes its members with useful information such as the condition of crops, prevailing prices, and the state of demand. The prices at which transactions are completed are quickly made available to the entire business world by an elaborate telegraph "ticker" system. Smaller organized markets, usually specializing in some local product, operate in many cities.

The marketing of commodities is greatly simplified and facilitated by the existence of organized exchanges. It is on the floor of the exchange that the supply forces passing upward from the primary producer, and the demand influences passing back from the ultimate consumer, meet and determine the price and distribution of the product The exchange does not control prices, but simply supplies facilities for quick and efficient trading. Any commodity for which there is a large demand the year round, and which is uniform enough to be capable of being standardized and graded as to kind and quality, can be dealt in on an organized exchange. These characteristics are essential so that persons purchasing may be certain of just what they are getting. The existence of organized markets assures producers of a definite, continuous market for their produce, expedites and simplifies the operations of speculators, and facilitates the transfer of speculative risks from businessmen to professional speculators. To a large degree, the usefulness of organized produce exchanges is tied up with the usefulness of speculation itself.

The Nature of Speculation.—During the process of production, which includes both physical production and marketing, quite a long period of time must elapse as the commodity passes from enterpriser to enterpriser. As a result, there is the danger, constantly present, that fluctuations in price during the period of production will wipe out margins of profit, and perhaps force many enterprisers into bankruptcy. Fluctuations in price may be due to changes in the desires of consumers, failure of producers properly to estimate consumers' demands in advance, and uncontrollable variations in supply, primarily due to natural forces. The first type is illustrated by changes in fashion, the second by occasional, temporary underproduction or overproduction of a given product, and the third by variations in crops because of weather conditions, pests, blights, and so on. If these price fluctuations can

be successfully predicted by skillful individuals, they may be turned into sources of personal profit, and indirectly reduced, or even eliminated. *A purchase or sale of goods in anticipation of demand, with the view to profiting by a change in price during the intervening period,* is called *speculation.*

In a sense, practically all enterprisers are speculators. Everyone who purchases materials or finished products for purposes of reselling later, in either the same or a changed form, assumes the risk that a change in price may take place during the period of production. The corner grocery store proprietor becomes a speculator when he purchases a barrel of sugar to be sold gradually by the pound, for he runs the risk that a change in the price of sugar will take place during the period of sale. Whether his books show a profit or a loss will depend in part on fluctuations in the price of sugar. The huge department store assumes, in part, the role of speculator every time new stocks are purchased, especially when large stocks are purchased far ahead in anticipation of important seasons, such as the Christmas or Easter trade. The miner, the farmer, and the manufacturer all become speculators when they purchase raw materials, equipment, and labor without a definite assurance that they will obtain a price for the finished product sufficient to cover their outlay.

Under a simple economic organization, where specialization and exchange have been but little developed, this speculative risk is relatively unimportant. Under modern conditions, however, it looms large. The concentration of people in cities, with the development of large-scale production and minute division of labor, cause a spreading of the gap between the beginning of production and final consumption. Somewhere in the process of production speculative risks must be assumed. They are inevitable. The question then arises, how should they be distributed? Should every businessman assume these risks as they occur in his operations, or should a group of marketing specialists assume the burden? Quite obviously, the latter is preferable if possible. The average enterpriser has neither the type of ability nor the fund of knowledge necessary to successful speculation. A miller may be well versed in the technical problem of grinding wheat into flour, but to understand at the same time the complex, delicate set of economic influences that determine the price of wheat and flour is likely to be beyond him. If the burden of price fluctuation can be shifted to a specialist who can make the study of the factors determining the price of wheat and flour a lifework, the efficiency of production should be increased.

It is true that there are some evils in speculation as it is now carried on (we shall presently consider some of these) but in general it performs a useful function. We may think of it as acting as a shock absorber in the industrial machine. Like all shock absorbers, it does not give protection against all the blows suffered in traveling the rough road of production, but properly conducted it does eliminate the ordinary blows and soften materially the force

of occasional sharp knocks. The legitimate speculator has his place in an efficient economic system. The services he renders are many, but we may conveniently classify them into two groups: the stabilization of prices, and the assumption of risks. In fulfilling both of these primary functions, the speculator performs the secondary function of providing a day-to-day, continuous market for the product in which he deals.

The Futures Contract.—It is in the marketing of produce that speculation is most highly developed, and at the same time most severely criticized. The work of the speculator can best be evaluated after a brief analysis of this problem. To begin with, it is essential that we understand the nature and use of futures sales.

A contract calling for the delivery of goods at a stated future time, and at a price agreed upon in advance, is called a *futures contract.* It is the business of speculators to deal in such contracts. If the speculator seeks to make a profit from a rise in the price of a commodity, he can buy it now and hold the contract until a later time when, if his forecast is correct, he can sell it at a gain. If, however, he anticipates a fall in price, he must make a futures sale, by which he agrees to deliver produce at a later date and at the price now prevailing for such contracts. If his expectations are realized, when the time comes to fulfill his contract, the price of the commodity will have fallen and he can purchase the quantity he must deliver at a figure low enough to make a profit. A specialist in cotton may believe, after a thorough study of market and crop conditions, that a drop is going to take place in the price of cotton, which drop is not being sufficiently foreseen and allowed for by other participants in the market. Let us suppose that cotton for delivery three months hence is selling at 30 cents a pound, but that the speculator believes that when the time actually arrives it will be selling for about 27 cents. Through the medium of the organized cotton market he will get in touch with someone—a spinner, perhaps, who requires an assured supply of cotton, or another speculator who anticipates a rise in price. A futures sale will be made, the first speculator agreeing to deliver, three months hence, a stated supply of cotton at the prevailing futures price of 30 cents a pound. If the price of cotton falls to 27 cents as he anticipated, he may buy up the cotton needed to fulfill his contract at that price, and pocket three cents a pound as profit. However, actual delivery of the product contracted for (cotton in our illustration) rarely takes place. Instead of buying cotton in the spot market to fulfill the terms of his agreement, the speculator usually cancels his maturing futures contract by buying a contract of the same maturity from some speculator who previously had *purchased* futures in cotton. The latter holds what is, in substance, an order for the delivery, at once, of cotton now worth only 27 cents; hence, his contract can be purchased at that price. By purchasing this contract, our original speculator then has two contracts—one to deliver cotton at 30 cents a pound, and the other to receive cotton, for which he agrees to pay 27 cents a

pound. The two contracts are offset, and he receives the difference of three cents a pound, through a process very similar to the system of clearing of checks used in banking. Should the price of cotton go up, our speculator will be forced to buy cotton at a price higher than that at which he agreed to sell it, in which case he will suffer a loss.

To engage in such a futures transaction, the speculator must agree to deliver cotton which is not in his possession at the time the contract is entered into. He sells something he does not own. Bitter criticism has been directed against this practice, popularly known as a "short" sale. However, where an actual delivery of the commodity results from such a sale, the case does not differ materially from the practice, quite common among manufacturers, builders, and the like, of undertaking to manufacture goods or construct a building for a customer at a specified price, even though at the time they do not have available the material nor the labor supply necessary to make good the agreement. No one ever questions the legitimacy of such transactions as these, yet short sales on the commodity exchanges are essentially the same in form. Even where there is no actual delivery of the commodity, but a mere offsetting of contracts between speculators who are on opposite sides of the market, the practice is justified by the general usefulness of organized speculative activity. Without the futures contract the marketing of goods would be seriously hampered. The assumption of speculative risks by professional speculators, the nature and advantages of which will be described, would likewise be impossible. Then, too, it must be remembered that whatever may be the immediate effect upon price of selling something one does not own, it is counterbalanced in the long run by the necessity of making a purchase at a later date to "cover" the short sale, which purchase will have the opposite effect upon market price. The importance and usefulness of futures contracts will be clearer after we have traced the effects of the speculator's work on economic activity.

The Stabilizing of Prices.—Speculators in commodities play an indispensable part in the stabilizing of prices. The entire year's output of a basic crop (such as wheat, corn, oats, or cotton) comes to fruition at one time. The consumption of each of these crops, however, must be spread over the entire year. This presents a real problem of adjusting supply to demand, for otherwise periods of shortage would alternate with periods of glut, and price fluctuations would be wide during the course of the year. An examination of price data, however, shows a considerable stability of prices of the basic crops throughout the year. For example, regardless of the size of the wheat harvest, whether it is a bumper crop or a very short one, we are able to secure a supply of bread all year round at about the same price. It is the speculator who is largely responsible for this adjustment.

Let us suppose that wheat is selling in January for $1.50 a bushel. The speculator, after thorough study of the probable size of the new crop in rela-

tion to the demand for it, comes to the conclusion that it will be unusually small, and that if the consumption of wheat is allowed to go on unchecked, the price will probably rise next summer to $2.00 a bushel. Seeking to make a profit, he will buy up large quantities of wheat in January (from the old crop) and store it with the view to selling it later at a gain. His act of purchase (together with that of other speculators) will increase the demand for wheat, and the price will tend to rise, perhaps being driven up to $1.65 a bushel. This higher price will curtail consumption and stimulate the use of substitutes for wheat in many of its less important uses. As a result of the storage and the decrease in consumption, a much larger supply will be on hand when the later summer period arrives than would have been available if the speculator had not entered the market. Instead of the price rising to $2.00, it may increase only to $1.85.

Thus the activity of the speculator, because of its dual effect of halting the price rise that would otherwise have resulted, and of adjusting the supply and demand of wheat between the two periods, will tend to steady consumption throughout the year. Should the speculator anticipate a large crop and a fall in the price of wheat, perhaps from $1.65 in January to $1.45 in the summer, the above procedure would have to be reversed. He would sell wheat for future delivery at around $1.65 a bushel, hoping to cover at $1.45 when his agreement falls due. In this case, the January sale would tend to lower the price of wheat at once, inducing an increase in immediate consumption. Therefore, the quantity of wheat available when the summer months arrive would be less than it would otherwise have been, and the price may only fall to $1.55 a bushel. So by purchases and sales based on forecasts of future supply, the speculator assists in stabilizing prices and equalizing supply and demand throughout the year.

The Assumption of Risks.—The facilities offered by produce exchanges simplify the transfer of certain market risks from the businessman to the speculator. Suppose that a spinner has agreed to deliver at a certain time cotton thread, the spinning of which will require 100 bales of cotton, the price of the finished thread being stated in the contract. It may well be that the spinner will not desire to purchase the cotton at once, but if he delays in purchasing he may suffer a financial loss should the price of cotton increase in the near future. The spinner can protect himself against changes in the price of cotton by purchasing a futures contract, providing for the delivery of 100 bales of cotton at an agreed price, at the time he desires to begin production. He is then protected against unfavorable price fluctuations, for he has agreed to deliver thread at a fixed price and has contracted to obtain the required cotton at an agreed price. The spread between these two prices will cover his costs and margin of profit. The risk of price change would be shifted to the shoulders of the speculator from whom the spinner made the futures purchase in cotton. This is the simplest form of risk transference

by means of a futures contract, and it is possible only when the businessman who is shifting the risk has already contracted for the sale of his finished product. It is really a form of what is called *contracting out.*

Hedging.—The proceeding just described is sometimes regarded as a form of *hedging,* but it will clarify our discussion to reserve this term for a more complex transaction, in which the businessman seeking protection against speculative risk has not agreed in advance to sell his finished product; he must sell it later for what it will bring on the market. Hedging consists in the making of a purchase in the ordinary trade (or spot) market, and a short sale in the speculative futures market at about the same time, in such a way that a loss from adverse price fluctuations on the first transaction will be offset by a corresponding gain from the second. The purpose is to assure the businessman making the hedge an ordinary trade profit on a real trade contract, by giving him protection against the uncertainty of price changes The futures sale is entirely separate from the trade purchase. The person hedging views the former as a kind of price insurance. He will cover the short sale later, not by handling the physical product, but by the method of canceling-out, described on page 139. The trading in the actual product will always take place in the spot market where the trader can examine samples and be certain that he is securing the grade he specifically desires

Consider the case of a country grain elevator operator. When wheat is purchased from the local farmers, it is probable that some time must elapse before the grain is shipped on to its next destination—perhaps the milling center of Minneapolis The price of wheat in Minneapolis will generally be higher than the price paid the local farmer by an amount sufficient to cover transportation, insurance, and other costs, plus a profit to the operator for his service in collecting and moving the grain. We may assume this "distance differential" to be a price spread of nine cents a bushel. Should the price of wheat fall while awaiting shipment or while in transit to Minneapolis, the operator will be forced to accept a lower price, and his trade profit may be wiped out. Since he does not profess to be a speculator in wheat, the wise operator shifts this risk of price fluctuations to the shoulders of a professional speculator by hedging. Let us suppose that on August 1 he purchased 10,000 bushels of wheat from local farmers at a cost of $1.50 a bushel, hoping to sell it in Minneapolis about December 1 at a profit. Since he will have to bear the cost of storing the wheat meanwhile (which cost we may assume to be eight cents), then to earn his trade profit he must obtain $1.67 a bushel for his wheat in Minneapolis in December—that is, $1.50 to cover the original cost of the wheat, plus nine cents to cover the distance differential (which includes his trade profit), plus eight cents to cover the storage cost. In order to protect himself against a loss growing out of price fluctuations, the operator will sell, on the Chicago Board of Trade, an equal quantity of wheat for future delivery at the very same time he buys the actual wheat. The date for the future

delivery will be selected to coincide with the date the operator anticipates disposing of his trade wheat in Minneapolis. This date we have assumed to be December 1, and the price at which December futures are selling in August may be assumed to be \$1.68,—that is, the August local elevator price of \$1.50,[3] plus a distance differential to Chicago of 10 cents, plus eight cents to cover all the costs of holding the wheat until the future delivery date. If now, when December 1 arrives, the price of wheat has fallen to \$1.45 at the elevator door and, consequently, to \$1.54 in Minneapolis and \$1.55 in Chicago, the operator is protected against loss.[4] He will sell his trade wheat to the millers of Minneapolis at \$1.54 a bushel,—13 cents less than the amount necessary to cover his total costs and yield his trade profit. However, in Chicago he stands to gain. He has agreed to deliver wheat on his futures contract at \$1.68 a bushel, but he can cover his sale at \$1.55 by purchasing wheat in the spot market, or by the method of canceling-out. On this transaction he makes a profit of 13 cents. The change in price, then, costs him 13 cents on his real trade transaction, but yielded him a profit of the same amount on his futures transaction. These two cancel out. Should the price of wheat have risen during the period, the opposite would be true. The operator would then have lost money on his futures transaction, but would have made an equal sum on his trade transaction. He has given up all possibility of profiting by price changes, while protecting himself from loss therefrom. He has simply guaranteed his trade profit against the danger of being wiped out by an adverse price movement. A hedging transaction thus serves as a form of insurance to the businessman, enabling him to transfer his market risks to speculators dealing on the commodity exchange.

The possibilities of hedging transactions, while greatest in those lines making use of the major crops, especially wheat and cotton, exist in varying degrees in many other lines. A trade transaction in a raw material can be hedged against a speculative transaction in the same material, as in the above illustration. Similarly, a speculative transaction in a raw material may be used to hedge a finished product, as, for example, the hedging of wheat against flour, raw cotton against cotton goods, or sugar against candy. To furnish protection, it is necessary that the two commodities hedged always vary in price in approximately the same manner. The price movements of both the commodity to be protected and that used as a hedge must be nearly equal during the period in question. Otherwise the insurance will be lost. For instance, if the relationship between the price of raw sugar and

[3] In this illustration the anticipated future local price is assumed to be the same as the present cash price, that is, \$1.50. Ordinarily, it would be a little higher or lower, depending on which way the market anticipates the price will move. Our assumption relieves the case of confusing complications, however, without changing the essential principle.

[4] There will be no storage or other costs for holding wheat this time, for we are now dealing with wheat for immediate delivery.

that of candy is not relatively constant, the degree of protection given a candy manufacturer by hedging in sugar is relatively slight. Ordinarily, however, such relationships are sufficiently close to provide fairly complete insurance, though it is not perfect. In some cases, substitute articles have such close price relations that it is possible to hedge one commodity against another, such as lard against cottonseed oil. Hedges of this type are somewhat unusual, however.

C. Some Defects of the Marketing Process, and Their Correction

Marketing in a Competitive Economy.—Few aspects of the present industrial system have received criticism comparable to that directed against the structure and process of marketing. The criticisms come from all directions. Farmers, in particular, have long distrusted the organized markets and future trading activities; repeated unsuccessful attempts have been made to outlaw both by congressional action. Consumer groups have charged the wholesale-retail hierarchy with extreme inefficiency and waste. Those engaged in one stage of the marketing process make heated charges against those occupied at other levels, as for example, the retailer against the wholesaler, and the independent wholesaler against the manufacturer who sells directly.

The marketing process is far from perfect, as we shall see in considering some of the problems of correction in the remaining pages of this chapter. However, much of the criticism against marketing procedures is, at root, a criticism of the institutions of the competitive economy itself. In Chapter XVIII we shall learn that, in a regime of free enterprise, consumer's choices, acting through the flexible price system, direct production. What is produced, and the manner of its distribution, depend upon the free choice of consumers and the private initiative of business enterprisers seeking profits. When food is dumped into a river it is the profit motive which is responsible for that act. When the price spread between grain on the farm and bread in the grocery store increases, it is usually because the intervening steps, developed by private enterprise under the profit motive, have satisfied the needs of consumers better or more cheaply. When recourse to government intervention is advocated (or accomplished) by subsidies, output control, financial aid, and restrictions placed on competitive behavior, it is the competitive economy that is being challenged. All these fundamental issues should be studied as problems of comprehensive economic policy and will be so considered in Part IX of this volume. To suggest that a socialistic economy would eliminate much of the marketing structure and simplify the remainder is a legitimate point for discussion. However, within a competitive economy, marketing is essential, for the reasons given above. We must not confuse improvement of that structure with demands for a fundamental reorganization of the economy as a whole. Let us rather try to correct specific marketing defects, without abolishing the system.

The Cost of Marketing.—The criticism most frequently made of marketing is that the costs of performing the functions are excessive. Marketing is said to absorb too large a part of the total costs, and the increasing ratio of marketing costs to total costs is assumed to indicate a probable growth in inefficiency and waste. It has been estimated that half the consumer's dollar is absorbed by marketing costs.[5] Another authority asserts that selling costs vary from almost nothing (in a direct sale by the manufacturer) to over 75 per cent of the final sale price[6] Retail markups appear to vary from 25 to 35 per cent in the typical retail grocery store However, it is difficult to get reliable data on the upward trend in marketing costs because of the loose manner in which selling cost is usually defined Nevertheless the following summary of this trend from 1850 to 1920 is available.[7]

THE PERCENTAGE OF TOTAL ECONOMIC EFFORT DEVOTED TO MATERIAL PRODUCTION AND TO MARKETING

Year	*Material Production Effort*	*"Commercial Effort" (Selling and Distribution)*
1850	80 2%	19 8%
1860	75 1	24 9
1870	72 0	28 0
1880	67 2	32 8
1890	63 3	36 7
1900	59 9	40 1
1910	53 5	46.5
1920	49 6	50 4

Studies of specific commodity groups furnish corroborative evidence. Using the period 1910 to 1914 as a base, the percentage of the retail price received by the farmer from the sale of 10 products (wheat-bread, eggs, butter, and so on) decreased from the average of 51 per cent to 45 per cent by 1927.[8] Statistics of foreign countries show a similar growth in marketing cost.

While such data are interesting and may be useful for many purposes, they mean but little as an index of the efficiency with which commodities are marketed A certain product may be produced and sold at five dollars a unit with just the most rudimentary marketing organization, absorbing less than 10 per cent of the total cost That same product, however, might be efficiently marketed and sold in large quantities, enabling the producer to introduce numerous economies of large scale production. The price might

[5] P D Converse *The Elements of Marketing* (1930) p 6

[6] H E Agnew and Dale Houghton *Marketing Policies* (1941) p 287

[7] Stuart Chase, *The Tragedy of Waste* (1925), p 213 (Quoted by Chase from a study by Sidney A Reeve)

[8] F E Clark and L D H Weld, *Marketing Agricultural Product* (1932), p 452

then fall to four dollars per unit, althought the new, highly developed marketing organization might then be absorbing 60 per cent of the total cost. It would be the height of foolishness to call the marketing cost of 60 per cent in the second case an indication of inefficiency, on the ground that formerly the product had a marketing cost of only 10 per cent. The improvement in marketing resulted in economies that enabled the producer to reduce the price from five dollars to four dollars per unit, and this would indicate a real increase in production efficiency. Marketing specialization takes place only when a reward in the form of profit is in the offing, and a product having a high marketing cost is more apt to be an example of a product, the marketing of which is a difficult problem, than it is an example of waste. In addition, the increasing percentage of marketing costs to total costs, as the years go by, reflects in a measure the increasing complexity of economic life. The ever-increasing specialization, as we have already noted, necessitates a more effective and elaborate marketing organization. The increase of marketing costs indicates a growing need for such services, rather than a general development of inefficiency and waste.

Mass Production and Product Differentiation.—In Chapter III we examined the economies of large-scale organization and the impact of mass production on the organization of business enterprise. The marketing structure has been profoundly affected by this trend because a large output requires highly developed market outlets. Where the physical characteristics of a product and the quality differences can be accurately determined by purchasing experts, as in raw materials and machinery, price competition can be relied upon to establish efficient production levels if that competition is reasonably free; but where physical characteristics are not easily identified, and average purchasers find it difficult to measure quality, the producer tries to protect his market by product differentiation, such as packaging, color, scent, or texture, combined with a trade name or brand to identify his output. This contributes to duplication and waste in marketing because it forces each wholesaler and retailer to stock a variety of different brands of the same good.

A casual glance at the shelves of a super-market or department store demonstrates the importance of product differentiation in almost all consumer goods. To clean our teeth we can select a paste, powder, or liquid. If we prefer paste, there is a wide variety of brands to consider, each differing in cleansing agent, texture, flavor, and container design. A manufacturer who desires to enter this competitive field on a mass production basis has a very difficult problem on his hands. A large, mechanized plant and trained personnel must be obtained before a single sale is made. Mass distribution involves the use of thousands of retail stores, with salesmen contacting each outlet. Each store must be supplied with a stock, and inventories for repeat orders must be established with wholesalers. The public must be informed

by local and national advertising on how to identify the product. Every producer of tooth paste, powder, or liquid, faces the same problem.

Although the objective of the mass distribution of an economically produced good is consistent with the economic welfare of the nation, the door is wide open for heavy economic waste. Excess plant capacity is a normal consequence of product differentiation Excess inventories mount at a tragic rate because stocks of a given branded commodity, such as tooth paste, are not only held in thousands of stores and warehouses, but are duplicated in a dozen or more competing brands in each individual store. Competitive advertising and selling generates tremendous pressure under such conditions. Mass distribution is necessary for efficiency, but to accomplish mass distribution some of the most obvious forms of wasteful effort are given fantastic opportunities for expansion

Correction of the defects in the modern mass marketing of differentiated products presents perplexing problems, and there is pressing need for research by both government and industry. Trade associations, working together with government agencies, should attack these problems with vigor. The techniques of scientific management and integration can contribute much toward improvement. Cooperative marketing, briefly reviewed below, reaches some of the difficulties. More attention to market analysis by producers would also help. Further, a strong government policy directed towards honest advertising, selling, and grading, combined with better dissemination of information among consumers, is needed Powerful lobbies have too long blocked federal action to protect the consumer. However, we must accept a residual amount of waste as the price of protecting freedom of enterprise and the competitive economy.

Scientific Management and Integration in Marketing.—The recognition that the rapid growth of the marketing process is not necessarily conclusive evidence of inefficiency and waste does not, however, absolve the distributive trades from criticism In common with other aspects of business activity, there is need in these lines for better management and more efficient integration of functions There are numerous indications of the shortcomings of present marketing techniques For example, merchandise has been left lying idle on shelves or in warehouses, while the supply of other goods is inadequate Often there are too many clerks to wait upon customers, or to handle records Establishments have been poorly arranged, and lack of coordination among the different departments is a frequent occurrence. These are but a few of the many instances of mismanagement which contribute to excessive marketing costs. The remedy for them lies in the application of better management principles Some of these principles were described in Chapter II. It was there suggested that careful selection of locations, scientific layout of buildings, job analysis, efficient wage systems, and modern personnel departments, can all be used constructively in marketing establishments.

The number of stages in marketing a product, and the complexity of the whole process, provide a fertile field for effective integration. The pressure of intense competition has already brought a tendency towards such simplification. Wholesalers now spread out and embrace several of the marketing steps, in some cases even going into the business of manufacturing the product they handle. They also frequently adopt and advertise their own private brands, seeking in this way to go over the head of the retailer and force him to carry their product because of the pressure of demand so created. While the wholesalers have been spreading out towards the retailer and manufacturer, the manufacturers and retailers have, on their part, retaliated by taking over part of the wholesaler's work. Many large manufacturers send salesmen directly to the local jobber or retailer, and in some cases they build up their own complete selling organization. Not a few have even taken over retail stores, thus completing the integration of all the steps in the marketing of their product. Retailers have also pushed back into the wholesaling stages. Such integration frequently results in greater efficiency, not only by eliminating unnecessary steps or duplication in the marketing process, but by the better coördination of the various stages.

Consumers' Coöperation.—Another development by which some groups have tried to effect economies in marketing is through the organization of cooperative establishments. A coöperative marketing organization is one in which a number of consumers or producers band themselves together for the joint purchase or sale of the commodities they use or produce, thereby dispensing with the usual middlemen who perform these functions. It is to be noted that they do it, however, only by setting up another organization of their own—the necessity for marketing machinery remains.

Consumers' coöperation involves the establishment of a store (usually retail) by a group of persons who intend to become its customers. The purpose is to secure goods for consumers on better terms than could be obtained from a retail store which is operated for profit. The consumers supply (or borrow) the capital, but each stockholder usually has only one vote, no matter how many shares he owns. A fixed rate of interest is paid on the stock, and any profits above this are distributed to the stockholders, not in proportion to their investment, but in proportion to the amount of goods each one has purchased from the cooperative. Thus the customers get the profits which in the usual retail establishment go to the proprietors.

In the beginning, consumers' cooperation was largely a British development. In 1844 a small group of English weavers organized the now famous Rochdale Cooperative Store. Shares of stock were sold to persons living in the vicinity at one pound per share, the low price giving opportunity for persons of small means to participate. The initial payment could even be made on an installment basis if desired. The rate of interest on the stock was fixed at five per cent, and profits were to be distributed at given intervals

on the basis of purchases made in the store. Each stockholder was given but one vote regardless of his holding of stock in the cooperative, in order to insure democratic control. The business was conducted strictly on a cash basis The idea spread rapidly until before the Second World War millions of English families were purchasing in over a thousand stores, which did a total business of over a billion and a half dollars annually.

This type of cooperation has a number of advantages. Prices to the consumer are often reduced by the elimination of the retailer's profit, the savings made in advertising, and generally low selling cost. Loyalty of the members assures steady sales, and at the same time assists in obtaining managers and help at low rates A saving is often made by reducing the variety of goods held in stock, since the competitive selling pressure is much reduced. On the other hand, insistence on cash payments, reduced variety of goods, failure to utilize selling appeals, and (sometimes) unwillingness to pay salaries high enough to attract good managers, have somewhat offset these advantages. Nevertheless their growth shows that they have had a good deal of success.

The cooperative movement was later extended to wholesaling and manufacturing in England Wholesale cooperative organizations own bakeries, canning factories, shoe factories, flour mills, wheat farms, coffee plantations, and coal mines National cooperative societies have been established and considerable integration of the various marketing stages has taken place.

The consumer cooperative movement has also shown great strength in Germany, France, Belgium, and the Scandinavian countries. As in Great Britain, the cooperatives operate local stores and large wholesale establishments and produce many of the products they sell Although consumer cooperatives have by no means achieved the same prominence in the United States, they are becoming increasingly important here The slower development of the movement in this country may be attributed to the greater purchasing power and the more individualistic nature of the American consumer However, in spite of its conspicuous lack of success prior to the 1930's, the movement has made considerable progress since that time. Government encouragement and the severe depression, which necessitated every economy on the part of the consumer, combined to give new impetus to the organization of cooperative societies, so that many are now established here

The most important cooperatively operated purchasing concerns in the United States, as indicated by the aggregate dollar volume of sales and the percentage of total business handled, are the farm supplies organizations These deal in such merchandise as feed, fertilizer, seed, farming implements, and hardware. It is estimated that in 1935 they did 23 per cent of all the farm supplies business in the United States[9] Cooperatives dealing chiefly

[9] Carl N Schmalz, "Co ops Not a Factor in Apparel Merchandising," *Women's Wear Daily*, Annual Review Number, December 28, 1938

in petroleum products, although much less important relatively to privately owned enterprises than the farm supplies associations, accounted for two per cent of the total distribution of petroleum products.[10] In a number of cases, particularly in the Middle West, cooperative organizations have successfully combined the handling of farm supplies and the distribution of petroleum products. Cooperative retail food stores serving urban communities, and general store cooperatives serving in small towns and rural districts, have also made some headway, although they still do less than one per cent of the total retail business in these lines.

Retailers' Cooperation.—Another phase of cooperative buying is retailers' cooperation. Economic pressure, largely in the form of keen competition, has brought about cooperation at two ends of the production process. Direct selling by large-scale businesses, such as the department store, the mail-order house, and the chain store, has impressed on the small retailer the fact that he cannot survive unless he is able to purchase his goods in large quantities at wholesale prices. Consequently, there have developed cooperative organizations of retailers for the purpose of accomplishing this Such organizations can deal directly with manufacturers, obtain trade dis counts, eliminate at least part of the wholesaler's profit, and, by branding their standard products, advertise as a unit. Sometimes the organization is an incorporated body acting practically as a substitute for the independent wholesaler, but often it is little more than a buying syndicate. Retail cooperation has not had the success many persons hoped for it. Strong opposition on the part of regular wholesalers, lack of loyalty among members, and the low-grade ability often found among small shopkeepers, have proved serious obstacles to overcome.

Farm Cooperatives.—Agricultural cooperative marketing, a form of cooperative selling, has been more successful in the United States and is growing steadily with strong government support. Farm cooperatives are formed chiefly to effect the unified sale of a product produced by many small farmers. This type of cooperative marketing is illustrated by the California Fruit Growers' Exchange. This organization is a combination of local citrus fruit growers located in southern California, and serves as a centralized marketing agency. The Exchange maintains agents in the various eastern cities who report on market conditions and prices, thus facilitating the most profitable distribution of the fruit. The Exchange can see that shipments are regular, in large lots, and can maintain most favorable relations with the railroads. In the northwest several strong cooperative organizations exist for the marketing of grain. Other products in which this method of organization is made use of are cattle, potatoes, all kinds of fruits, and tobacco. Many cooperative creameries are now in operation in Minnesota, which state is the

[10] *Ibid*

stronghold of the movement in this country. This kind of coöperation has also been successful in Europe, especially in Denmark. Such organizations bring gain to the farmer by improving the quality, packing, and grading of his product, eliminating the profit of the local buyer, reducing the shipping costs, and arranging a more steady flow of products to the market. It has experienced the difficulty, common also to consumers' coöperation, that it is hard to get farmers to realize the need of competent specialists to manage the coöperative. They have been unwilling to pay the salaries necessary to secure such management. In many cases the exaggerated hopes of the farmers have been severely disappointed, when they discovered how great are the costs of taking over the middleman's functions.

An Appraisal of Marketing Coöperatives.—Although the coöperative movement in the United States has hardly lived up to the claims of its proponents, experience abroad demonstrates that it can accomplish important reforms. The potentialities of the movement therefore appear impressive. Our government policy has in many ways been favorable to the spread of coöperation. The Coöperative Marketing Act of 1926 encouraged the formation of agricultural coöperatives, and subsequent agricultural legislation continued this policy, especially in extending credit to farmers and farm organizations. The federal income tax law, under which coöperatives are exempt as nonprofit organizations, has helped the movement. Independent marketing enterprises have bitterly denounced this policy as discriminatory, claiming, quite correctly, that the coöperative is designed for private gain rather than for philanthropic purposes. Where conditions are favorable the movement will grow, but under present conditions it cannot be considered a general panacea.

Abuses in Commodity Speculation.—Speculation in commodities performs useful economic functions, but, as in the case of security markets, there is always some danger that illegitimate trading on the exchanges will hamper, rather than facilitate, the efficiency of production. The ease with which trading in produce and raw materials can be accomplished induces unqualified persons to use the organized exchanges as gambling institutions. Inexperienced persons can take a "flier" in wheat futures with about the same ease that they can deal in Pennsylvania Railroad stock. An incorrect guess may cause a serious disruption of the market. Feverish periods of rising and falling commodity prices, having no basis in real economic conditions, may be initiated and carried forward by heavy speculative buying and selling on the part of the general public. The upsetting consequences to the thousands of legitimate producers and processors, using the market for real transactions or hedging, can easily be appreciated. It is very difficult to prevent such gambling transactions, but some degree of protection results automatically from the trading of the professional speculator. Should the market move in the wrong direction, the professional speculator, with his expert knowledge

of marketing conditions, will tend to increase his operations and thereby counteract the transactions of the novice.

The manipulation of prices by cliques of professional speculators is a more serious danger. Since the speculator earns his profit through fluctuations in commodity prices, there is a strong temptation to control such fluctuations wherever possible. Commodity markets, like stock exchanges, are open to manipulation by spreading false rumors, by washing sales, cornering the market, and through dishonest practices of the brokers themselves. The spreading of false rumors has its greatest effect on the nonprofessional speculator. The evil can best be reduced by widespread publicity of all the available information as to the true condition of the market. Wash sales are fictitious transactions made through the exchanges for the purpose of raising or lowering the prices of stocks or of produce. An individual or a group of individuals may buy and sell a commodity at the same time and at a price agreed upon, without any intention of delivering or receiving the goods, but merely, by their bidding and taking, to influence the price upward or downward for their own advantage. Such transactions are forbidden by the rules of most exchanges, but when the manipulators are not brokers, but are professional speculators using one broker to buy and another to sell, detection is very difficult. During the United States Senate investigation of fluctuations in wheat futures, it was asserted that the majority of the days on which unusually violent price fluctuations took place were days on which one or more of the more important traders bought or sold 2,000,000 or more bushels of May wheat.[11] These could easily have been manipulative transactions.

The corner is even more difficult to prevent. A group of speculators may buy up all the available supply of a product and at the same time absorb all the offerings of short sellers. The result will be that the short sellers will find themselves unable to carry out their agreements to deliver when their contracts fall due. "A corner, then, is the result of an oversold market, bringing about a situation in which the sellers are unable to fulfill their contracts and have to buy back from those to whom they have contracted to deliver, or, in other words, settle their contracts by paying over to those who have cornered the market the difference between the price they have contracted to sell for and the price which manipulators have succeeded in bringing about."[12] It is practically impossible to obtain sufficient monopoly control to corner an entire crop. Successful corners are more often restricted to the futures maturing in a particular month. The most famous successful corner was the Leiter corner of the wheat market in 1897. A later attempt by Leiter was a failure.

The activities of irresponsible brokers can become very serious. Brokers

[11] See F. L. Vaughan, *Marketing and Advertising* (1928), p. 171.
[12] J. G. Smith, *Organized Produce Markets* (1922), p. 112.

handle large sums of money for their customers and frequently hold possession of the various kinds of certificates of ownership given to them as security for customers' loans. The opportunity to profit by speculating with these funds, or with even larger amounts borrowed from the banks, has sometimes been a temptation too great to withstand. During the great depression of the 1930's many brokerage houses failed because of such misuse of customer equities. These are illegal acts subject to criminal prosecution, but they occur all too frequently.

Correcting the Abuses of Speculative Markets.—The best means of preventing such pernicious activities as the making of fictitious sales, cornering the market, and other devices for manipulating prices, is the adoption and rigorous enforcement of rules by the exchanges prohibiting such practices on the part of their members. This requires the right to inspect the books and records of the members of the exchange in a most searching manner. Self-regulation by exchanges has been increasing. The Chicago Board of Trade has regulations authorizing the extension of the delivery date of future contracts in order to protect traders unfairly caught in a tight market. If price movements become unreasonably great, the exchange can set limits on the spread of price fluctuations in any one day

However, since commodity exchanges are private organizations their power of control is decidedly limited Hence, in response to public demand, considerable government supervision has been established. The Grain Futures Act of 1922 provided for a Grain Futures Administration under the Department of Agriculture, with power to control rules adopted by the grain exchanges, to compel brokers to keep the records of their transactions open to inspection, and to call for any information it desired concerning transactions that were handled by the exchanges This control was made effective by requiring grain exchanges to operate under federal licenses, subject to revocation in the event of noncompliance. The law was amended by the Commodity Exchange Act of 1936, which increased the powers and broadened the jurisdiction of the administration. Cotton, rice, corn, oats, barley, rye, flaxseed, butter, eggs, and Irish potatoes were included in the coverage in 1938, and in 1940 wool, fats and oils, soybeans and peanuts were added. The law also provided for the creation of a Commodity Exchange Administration under the Department of Agriculture, to supervise all transactions on the floor of the exchanges, and it made mandatory the admission of farm cooperatives to exchange membership.

During the Second World War the price-fixing powers of the Office of Price Administration restricted the activities of exchanges to such a degree that many were forced either to close or to operate on a very limited basis Prices pressed tightly against fixed price ceilings left little room for active markets. The revival of the exchanges will test the effectiveness of government regulation. A firm control of speculation appears mandatory in our

complex marketing system, for reckless speculation and price manipulation can seriously disrupt the whole chain of marketing from the primary producer to the final consumer. The rise of the Labor party to power in England placed British commodity exchanges in the hands of the government. The pressure thus placed upon American markets, plus the difficulty of regulating private exchanges, may force government operation of commodity exchanges in the United States.

Summary

Marketing is the creation of time, place, and possession utilities. The machinery of marketing becomes more elaborate as specialization increases. Marketing coördinates consumers' demands with the means of satisfying them, and performs other minor functions. The presence of middlemen, who specialize in the various stages and types of marketing, is essential to this process. The chief types of marketing specialists are wholesalers and retailers—such as the general store, specialty store, chain store, department store, mail-order house, and super-market.

The marketing of commodities is facilitated by organized markets known as produce (or commodity) exchanges, where brokers and dealers trade and speculate in staple commodities. Speculation is the purchase or sale of a commodity in anticipation of price changes, with a view to profiting therefrom. It cannot be eliminated from industry, and it is best carried on when in the hands of professional speculators. Speculation in commodities stabilizes prices, equalizes consumption and supplies, and reduces business risks. By means of hedging contracts associated with dealings in futures on the commodity exchanges, businessmen are able to transfer most of the risks of price fluctuations to professional speculators. Much of the work of speculation depends upon the use of futures contracts, which call for the delivery of a commodity at a stated future time, the price being agreed upon in advance.

Much of the criticism directed against the marketing organization is at root a criticism of the competitive economy itself. Marketing is complex in a competitive system and its critics must accept that fact. The rising costs of marketing do not necessarily prove that the organization is wasteful, although there are many evidences of inefficiency. Mass distribution of differentiated products is necessary but costly, leading to considerable economic waste. Corrective action by private industry and the government must be extended. Better application of scientific management principles and the integration of closely related marketing stages would be beneficial. Coöperative marketing can save its membership the profits of middlemen. Government policy has been very favorable to the growth of coöperation, but the movement is not a panacea for marketing ills. Speculation in commodities

is characterized by a number of abuses, such as the ill-informed operations of nonprofessional outsiders, the manipulation of prices by fictitious sales and corners, and the misuse of funds entrusted to brokers. To remedy these evils, exchanges must maintain strict rules and enforce these rules by inspection of members' records. Commodity exchanges are regulated by the Commodity Exchange Administration, created by the Commodity Exchange Act of 1936. If self-regulation, backed by government regulation, proves unable to remove the more serious abuses of commodity speculation, government operation of the exchanges may prove to be the only adequate answer.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

A keen but brief analysis of the subject matter of this chapter is that of Alfred Marshall, in his *Industry and Trade* (1921), Chapters V to VII, inclusive. *Marketing of Agricultural Products* (1932) by F. E. Clark and L. D. H. Weld, is excellent in its emphasis on the economics of marketing. F. E. Clark, *Principles of Marketing* (1935), and P. D. Converse, *The Elements of Marketing* (1935), are comprehensive, reliable texts. J. F. Pyle's *Marketing Principles* (1936), and P. W. Ivey's *Principles of Marketing* (1921) contributed directly in the writing of several sections of this chapter. F. L. Vaughan's *Marketing and Advertising* (1928) is unique in its social approach. W. D. Moriarity, in his *Economics of Marketing and Advertising,* also avoids undue emphasis on the business approach to the subject. The best book we have seen on the factual or practical aspects is *Marketing Policies* by H. E. Agnew and Dale Houghton (1941). One of the best discussions of speculation is an English work by J. G. Smith, *Organized Produce Markets* (1922). G. W. Hoffman's *Future Trading* (1932) is a thorough study of the organization and operation of commodity markets. All of these texts have sections or chapters on government regulation of marketing and speculation. A clear, concise summary of the government regulation of organized exchanges is to be found in Chapter XXIII of H. D. Koontz' *Government Control of Business* (1941).

PART III

IMPROVING THE POSITION OF LABOR

C H A P T E R V I I

The Background of Labor Unrest

A. The Causes and Extent of Industrial Unrest

Labor's Position Under Capitalism.—In the first chapter of this book there was given a brief sketch of the historical development which brought the modern industrial system into being. It was shown there that, in the medieval system of feudalism the masses of the people were agricultural peasants, living in a state of serfdom under the domination of manorial lords. The Industrial Revolution swept this system away and replaced it with the institutions of capitalism. In the latter system, the masses of the people are no longer peasant serfs, but are free laborers, working for money wages in various kinds of industrial establishments under the direction of capitalistic employers. It is in this relationship between wage-earners and employers that the labor problems of our time have their basis.

The rise of the new industrial system led to results that were two-sided. It brought about a marvelous growth of material production, but this was accompanied by almost complete disregard for the well-being of the human beings caught as workers in the early factories. The inhumanity with which men, women, and children were treated in this transition period is now notorious. The laborers worked from 12 to 16 hours a day in dark, crowded factories. Young girls and children crawled in mines dragging heavy carts of coal, rarely seeing the light of day. Boys and girls six to ten years of age labored from dawn to dark. Overworked, attacked by disease and malnutrition, their bodies became deformed, and the worker was an old man at forty. Under such conditions, protest and conflict were inevitable. The interests of employers and employees clashed over the division of the product and the conditions of work; but all efforts at reform were bitterly opposed. Early attempts of the workers to organize were made illegal in England by the passage of the Combinations Acts of 1799 and 1800. Factory legislation to improve working conditions was very slow to develop.

It was in this fertile soil that the labor movement had its genesis. Although the gains since made by labor through protective legislation and organization are impressive, the industrial pattern that emerged since the Industrial Revolution retains the basic elements of conflict. The wage system requires a bargain between employer and employee as to wage rates, hours of employment, and conditions of work. In truth, modern mass pro

duction, with its reduction of the average worker from the position of a skilled artisan to that of an unskilled hand on an assembly line, has intensified the dependence of the worker. Social security legislation and the rising power of organized labor owe a considerable part of their drive to the impact of mass production methods on the life of the modern worker.

Evidences of Industrial Unrest.—As long as competition, free enterprise, and private property remain as fundamental institutions in our economy, the employer and employee relationship will exist. Therefore, the two economic classes, popularly labeled *capital* and *labor*, must cooperate if productive efficiency is to be maintained. Mutual suspicion, originating in misunderstanding, dissatisfaction, and distrust, reduces industrial efficiency, both by lowering the effort put forth during periods of production, and by stoppage of work during periods of open conflict. The national income suffers in periods of armed truce as well as during periods of active industrial warfare The problem of establishing amicable relations between the employer and the employee ranks high in the list of important issues facing civilization. The seriousness of industrial unrest has been plainly evident for many years to the most casual newspaper reader. Accurate measurement of the extent of industrial unrest is difficult, but data on labor turnover and strikes give some indication of the quantitative importance of the problem

Labor turnover means change in the personnel of an employers' working force—the transfer of workers from one employer to another. In principle, it measures the amount of employment necessary to maintain a given average working force during a stated time period Statistical measurement is awkward because men who leave employment may not be replaced, and new employees may be hired to increase the total working force rather than to replace men who have been lost Variations of the business cycle widen this discrepancy between separations and replacements. The United States Department of Labor therefore gives turnover rates of (1) separations to total employment and (2) accessions to total employment. In 1941 the average separation rate for all manufacturing was 46 48 per cent, with a high of 69 63 in automobiles and a low of 20 64 per cent in petroleum refining [1] The average accessions rate for that year was 64 51 per cent, with a high of 124 32 per cent in aircraft and a low of 27 26 in petroleum refining.[2] Individual firm rates vary much more widely, some reaching several hundred per cent. While the effect on labor of the approaching war was reflected in 1941 data, prewar rates are not very different. Studies in the depression years of the thirties show average rates of about 40 per cent. While the causes of such shifting of workers are many, including illness, nonscientific hiring and placement of workers, and the personal problems of the individual employee,

[1] Data quoted from J E Walters, *Personnel Relations* (1945), p 249

[2] *Ibid* p 250

labor turnover remains one of the best measures of industrial dissatisfaction we have It is evident that unrest is serious in modern industry

The most objective form of industrial unrest is the strike The summary given in the following table shows the trend in the number of strikes from 1916 to 1945[3] The number of strikes declined rapidly from 1920 to 1932.

LABOR DISPUTES AND WORKERS INVOLVED (1916 1945)

Period	*Average number of disputes per year*	*Relative number of disputes (1916 1921 = 100)*	*Average number of workers involved per year (in thousands)*	*Relative number of workers (1916 1921 = 100)*
1916 1921	3,503	100	1,798	100
1922 1926	1,250	36	756	42
1927 1932	753	21	297	16
1933 1937	2,495	71	1,280	72
1938 1941	3,045	87	1,200	67
1942 1945	4,101	117	2,101	117

This decline did not necessarily imply less dissatisfaction on the part of labor. It is probable that a combination of circumstances, such as improved living standards, inadequate union programs, and the lack of a strong public and governmental sympathy for the strike technique, offers a more accurate explanation This interpretation is supported by the resurgent wave of serious strikes which began in 1933 A considerable part of the impetus of this development must be attributed to the rise of an insurgent industrial unionism, the rise of a new group of energetic union leaders, and the marked change in the attitude of the government towards labor. The passage of federal legislation which guaranteed the rights of labor to organize and bargain collectively strengthened materially the hand of the union.[4] Demands for official recognition of the union became the most important single cause of industrial disputes

With the advent of the Second World War in 1939, the number of strikes remained at about the 1933 1937 average until 1941, in which year the number almost doubled. The entrance of the United States into the war brought a wave of patriotism which, supported by the no-strike pledges of many labor leaders, resulted in a sharp decline in the number of strikes in 1942 Thereafter, the upward trend was resumed The rising cost of living, the

[3] Statistics adapted from *Monthly Labor Review* Vol 62, No 5, May, 1946, p 720

[4] See, *infra* Chap IX

influx of new workers, and the attempt of government to control wage rates, explain the wartime and postwar increase in industrial disputes.

The normal tendency for strikes to increase in number during periods of prosperity and decrease during periods of depression must also be considered in any analysis of strike frequency. Data for the decades prior to 1930 demonstrate this principle clearly. In years of depression, workers are interested in steady employment rather than higher wages and better working conditions. With prosperity, confidence returns and union activity and membership revive rapidly. The exceptional increase in the number of industrial disputes since 1933 has been explained above. This reversal of the normal relation between labor disputes and business conditions is probably temporary.

The Causes of Industrial Unrest.—The causes of industrial unrest are diverse and difficult to summarize. First in importance is the belief, widespread among workmen, that the present system treats the working population unjustly. The workers, it is said, create the product of industry but they secure only a part of that product, the rest being held back by their employers. Business profits are believed to be enormous, and big business is viewed as a device for the exploitation of the masses. The result is the growth of a strong resentment and skepticism towards employers, giving rise to "soldiering" (that is, deliberately working slowly) and limitation of output. The existence of wide differences in individual incomes is the next most important cause of unrest. Those who work seem to get but little of this world's goods, while the good things of life flow in large streams to those whom the worker views as nonproducers. He sees extravagant living about him, especially as it is painted in an exaggerated form in the motion pictures, and feels a dissatisfaction with his lot.

There are many other economic factors against which he reacts He believes that the hours of labor should be shortened, giving him more leisure time, and perhaps increasing the number of jobs available. He feels a lack of security; the dangers of unemployment, and the poverty of old age are constantly before him. Some writers believe that this lack of security is the most important single cause of unrest. The struggle between the employer and the employee itself leads to tactics that bring about further dissatisfaction and conflict. For example, union efforts to obtain recognition by employers, to share in determining conditions of work, and to establish a shop closed against non union men, cause additional unrest and struggle. The problem of bad housing, especially in the slums of our cities and industrial towns, leads to further dissatisfaction. Lack of educational facilities for workmen and their children, lack of recreational facilities, bad health caused by such factors as the housing situation and undernourishment, all contribute towards an unhealthy attitude of mind. Recently there has also been developing a belief that the worker should have some voice in the management

of the industry in which he works. The attitude of the capitalist-employer, that his business is his own private property with which he can do as he pleases, is being challenged both by direct show of force in industrial conflict, and by longer range political action on the part of organized labor.

Labor leaders have always declared that public officials, the courts, and the lawmakers are all prejudiced against the laborer's interests, and in favor of the interests of employer and property owner. Legislation to improve the workers' lot has been difficult to pass, and the right to strike and the existence of the union itself were declared legal only after a long bitter struggle. Once a dispute arises and a strike is called, police and local governmental authorities in many cases side with the employer against the striker. Property rights appear to be more "sacred" that human rights, in the eyes of the law. Federal legislation in labor's behalf has mitigated somewhat the force of the worker's criticism of government attitudes. Indeed, prior to 1947 employers were beginning to feel that the situation had been reversed, the state being so solicitous for labor that it discriminated unfairly against "capital." However, the Labor and Management Relations law of 1947 (to be described more fully later) clearly restored some of the "lost rights" of employers, and placed restrictions on labor organizations. This reinforced the feeling of labor that government is fundamentally on the side of employers and property owners. This feeling therefore remains as a causal factor in labor unrest.

B. Organized Labor and Organized Capital

Labor Organizations Defined.—To carry on their side of the industrial conflict, laborers have found it desirable to organize themselves into unions, variously called *labor organizations, trade unions,* or *labor unions.*[5] *Labor unions* is at once the simplest and most descriptive of these terms; therefore, we shall use it as a broad concept, to include all the labor organizations with which this and the next two chapters will deal. So used, the term *labor union* may be defined as a permanent organization of wage-earners, having for its purpose the maintenance and improvement of the conditions under which they work. The essential characteristics of such a union are the permanence and continuity of its organization, the inclusion of only wage-earners in its ranks, a militant attitude, and the substitution of collective for individual

[5] There is considerable confusion in the terms employed by different writers in the literature devoted to labor problems. For instance, the term *labor union* is sometimes used (as we have used it) in a broad generic sense, to include unions of all kinds; but other writers use it only in a narrower, specific sense, to denote *general* labor unions of the type to be described. These writers prefer the term *labor organizations* for the broader concept. Still other writers prefer the term *trade unions* for the all-inclusive category, but this is more properly employed as a synonym for *craft unions,* which will likewise be described. We shall encounter other words about which similar ambiguity prevails. We have adopted here the definitions which seem to us most logical, but have indicated the alternative usages.

bargaining. It seeks to protect the interests of the wage-earner as against those of the employer and society in general.

Structural Types of Labor Organizations.—Labor organizations may be classified according to their structure into three general types. These are the general union, the craft union, and the industrial union. *General unions* are broad organizations that will admit all kinds of workers, regardless of the occupation or industry in which they are employed. The only qualification for membership is that the applicant be a worker—a wage-earner. The Knights of Labor, established in 1869, was such an organization. It sought to enter politics, and it assumed that the interests of all workmen were identical, regardless of their location or type of work. Its aim was to elevate the status of workers in general. Failure to harmonize the interests of different classes of workers, combined with difficulties encountered in entering politics, brought about its downfall; but for a time it was very strong, reaching its peak about 1886. A *craft union* is an organization of all the workers in one particular craft or trade.[6] Organizations of carpenters, steamfitters, or brick layers will serve as illustrations. The best known craft unions are the railroad brotherhoods. An *industrial union* is an organization of all the workers within a given industry, regardless of the type of work in which each individual may be engaged Craft lines are ignored. The United Mine Workers of America, led for many years by John L. Lewis, is an industrial union, because it includes in its organization mine employees of all kinds. The employees in the clothing trades are organized into a strong industrial union, called the Amalgamated Clothing Workers of America.

There is a sharp conflict of interests between craft and industrial unions, because they cut across each other's territory. The craft union is a horizontal form of organization, embracing workers of a given kind of skill in many industries, while the industrial union is vertical, including all the workers of an industry regardless of their craft. So, an electrician employed in the automobile industry might belong either to the union of his craft or to the United Automobile Workers, an industrial organization. This conflict of jurisdictions leads to intense rivalry and bitterness between unions of these two types The craft unions are more exclusive, aristocratic, and conservative, usually representing skilled workers; while the industrial unions, because they reach down into the semiskilled and unskilled workers of their respective industries, are more democratic—and often more radical.

Local craft and industrial unions are frequently combined into national federations of their several crafts or industries; and in some cases the national federations are members of broader, international organizations. Different craft or industrial unions in the same locality may also be associated together

[6] The term *trade union*, strictly construed, is synonymous with *craft union* but in popular parlance it has come to be used to denote labor unions of all kinds, hence, the expression *craft union* is to be preferred

into city central unions or other regional organizations for cooperation in dealing with local problems in which they have a common interest.

Functional Types of Unions.—The late Professor Robert F. Hoxie suggested that a more significant classification of labor organizations could be formulated on the basis of the functions they perform. He suggested that unions might be termed *business unions, free or uplift unions, revolutionary unions,* and *predatory unions,* in accordance with their functional aspects. A *business union* is one that is trade-conscious rather than class-conscious. Hence, the craft union is usually of the business type It expresses the viewpoint of the workers in the craft rather than that of all the workers in the industry, or of the working class as a whole. The business union seeks to obtain more for its members, here and now, in the form of higher wages, shorter hours, and better working conditions, without regard to the welfare of others outside its own particular group. It is usually conservative, believes in the present capitalistic organization and wage system, and operates on a collective bargaining basis with employers.

The *free or uplift union* is one that has an idealistic viewpoint. It may be trade-conscious, but it is also class-conscious, and may even go so far as to think in terms of the interests of society in general. It is conservative and law-abiding. It seeks to improve the moral, intellectual, and social life of the worker, securing for him leisure, insurance, and a general improvement in his conditions of life. The Knights of Labor, already referred to, was such an organization. General labor unions are most likely to be of this type.

Revolutionary unions are radical both in viewpoint and in action. They are opposed to the view that there is a harmony of interests between the wage-earners and the employing class. They repudiate, or at least tend to repudiate, the existing institutional order, especially the individual ownership of the means of production and the wage system. One branch of this type of union is composed of organizations which are willing to bargain with the employer and live up to contractual obligations for the time being, but which hope in the long run to reorganize society. On the other hand, there are revolutionary unions which believe in no compromise with the present system, believing rather in an organization of society purely on industrial lines. They advocate direct action and sabotage, and they often resort to violence. The Industrial Workers of the World is such an organization. Industrial unions are more likely to be of the revolutionary type than are craft unions, but some industrial unions are conservative and businesslike.

A *predatory union* is one concerned solely with immediate results, and its methods are wholly pragmatic. It seeks ruthlessly to obtain what it wants at the most appropriate time, regardless of ethical and legal scruples. The building-trade organizations have been classed as belonging to this group. Sometimes union leaders are downright criminal in their behavior, not only resorting to unscrupulous methods to attain the objectives of the union, but in

some cases going so far as to use their positions to line their own pockets with gold, even at the expense of their members. The 1935-1937 investigations in New York City, led by Thomas E. Dewey, then District Attorney, exposed union extortion and racketeering in a number of industries, among them clothing, food distribution, motion picture projection, restaurants, and other trades. More recently, the Bioff case focused public attention upon extortion in the motion picture industry. Bioff obtained enormous sums of money from motion picture executives by threatening them with strikes if they did not pay, before he was finally prosecuted and sent to jail.

Obviously no perfect illustration can be found of any one of the functional types, each organization combining several aspects of the functions described. Perhaps it would be more accurate to say that the functions of labor organizations can be described as business, uplift, revolutionary, and predatory, some unions emphasizing one function and some another. In many cases the function given most prominence depends on the group leaders in charge of the organization at the time.

Open and Closed Unions.—Labor organizations may be further classified as *open* and *closed*. The *open union* is one which maintains few membership restrictions or entrance requirements other than that the member belong to the craft or industry which the union represents. The *closed union* limits its numbers by means of high initiation fees and membership dues, citizenship requirements, and entrance examinations to determine trade proficiency and physical health. Often women and members of certain racial and religious groups are barred by tacit agreement. Some unions further limit the possibilities of entering the trade by apprenticeship regulations. A number of craft unions, particularly in the building trades, require an apprenticeship of three to four years before a worker can qualify as a journeyman. Certain unions maintain a given ratio between the number of apprentices and journeymen. Such restrictions are designed to keep certain types of labor scarce, and to protect union members from the competition of newcomers. Although such monopolistic membership restrictions may secure advantages for those already in the trade, they are likely to be detrimental to labor as a whole. By keeping workers out of certain occupations, they increase the numbers seeking employment elsewhere, and thereby depress wages in the unrestricted trades. Thus a few exclusive groups profit at the expense of the rest.

The Growth of Labor Organizations in the United States.—The growth of union membership in this country was very slow until about 1934, but the rise in the following decade was steady and rapid. The table below shows the growth in total membership from 1910 to 1944.[7] While the trend was

[7] Data for 1910 to 1932, inclusive, from Leo Wolman and Gustav Peck, *Labor Groups in the Social Structure Recent Trends* (1933), p 832 Data for 1936 to 1944 from the Department of Labor, Bureau of Labor Statistics, quoted by Florence Peterson in *American Labor Unions* (1945), p 56

MEMBERSHIP OF AMERICAN LABOR UNIONS, 1910-1944 ✓

Year	Membership	Year	Membership	Year	Membership
1910	2,184,200	1924	3,536,600	1937	7,400,000
1914	2,716,900	1928	3,449,100	1940	8,500,000
1918	3,508,400	1932	3,144,000	1944	13,750,000
1920	5,110,800	1936	4,700,000		

steadily upward from the eighties, the total membership of over five million workers in 1920 was less than 20 per cent of the entire working population. From 1920 until 1933 the trend reversed itself, reaching a new low of about three million in 1932. The National Industrial Recovery Act of 1933 probably laid the foundations for the unprecedented labor movement of the thirties. This act provided that every industrial code approved under its authorization should contain the provision "that employees shall have the right to organize and bargain collectively through representatives of their own choosing," free from all restraint, interference, or coercion by employers. The rigorous enforcement of this law during its short life gave new momentum to labor organization. The creation of the Committee for Industrial Organization (CIO) in 1935 brought into the union field mass production industries previously unorganized. By 1940 the prewar peak was reached, with over eight and one-half million members. The urge for war production and the activity of the War Labor Board accelerated the pace, until the total union membership is now (1947) estimated to be over fourteen million.

The American Federation of Labor.—Until 1935 the American Federation of Labor (often designated as AFL) was the undisputed leader of the American labor movement. Organized in 1881, the American Federation of Labor has had two basic precepts: (1) The belief that union organization must take cognizance of the existence of different crafts and skills and organize where possible on a craft basis; (2) the conviction that while each craft should have its own union and work independently in its own particular sphere, a national organization is necessary which will represent all unions in their common and broader needs. Propaganda for a shorter working day, minimum wage and hour legislation, the use of the union label, and assistance in the organization of new unions are good examples of its activities.

The Federation is composed of thousands of labor-union organizations, each enjoying a considerable degree of autonomy. The individual wage-earner belongs only through his affiliation with his local union. Where a trade is organized into local, state, and national unions, the national organization may belong to the Federation. Where no national union exists, the local union itself may belong directly. In some cases city councils of local labor unions send representatives to the Federation. To coördinate the work of the

Federation a number of national departments have been created, each one being a grouping of several allied trades. Since 1923 there have been four such departments the building trades, metal trades, railway employees, and union label. They were established by the Federation as a result of its experiences with jurisdictional disputes among the national unions in the different industries. They serve as agencies through which the various craft unions can settle the difficulties which arise because of their common interest in a particular industry. Because of their quasi-industrial nature, they may be regarded as a concession in the direction of industrial unionism.

The annual convention of the Federation serves as a clearing house for labor information. Through the central executive committee, a powerful influence can be exerted in the interest of specific objectives. The American Federation of Labor has persistently stayed out of partisan politics, but has put the pressure of organized labor behind any specific movement or action deemed favorable to labor.

The Congress of Industrial Organizations.—At the annual convention of the American Federation of Labor in October, 1935, there developed an insurgent movement which was to enjoy spectacular success under the banner of the Committee for Industrial Organization. For some years prior to that convention, a number of union leaders had been disturbed about certain circumstances which they felt needed attention. For one thing, union membership in the Federation had suffered a decline after the temporary upward surge in 1934, although the right to organize and bargain collectively was now guaranteed by the government. Furthermore, there were entire industries (many of them of great importance) which were practically unorganized, including steel, automobiles, textiles, and rubber. Also, there were complaints about the lack of democracy in some of the Federation unions whose officials wielded arbitrary power, and were in some cases corrupt. Dissatisfaction was expressed, too, at the relative inactivity of the Federation in national politics. Finally, it was thought by some that the explanation of these facts lay in the fundamental policy and principle of the AFL to organize on a craft rather than an industrial basis. It was felt that industrial unionism in mass-production industries, which would unite all the workers in a particular industry in a single union, was the only effective method of achieving organization for the great masses of workers.

As an outcome of the bitter struggle at the convention, John L. Lewis (president of the United Mine Workers) and the leaders of seven other large national unions met in November, 1935, and formed the Committee for Industrial Organization (CIO). This committee began immediately an intensive organizational drive. Successes were scored in industries formerly regarded as impregnably nonunion: rubber, automobiles, and steel. Several unions affiliated themselves with the Committee, whereupon the American Federation retaliated by expelling 10 unions one year later. All the com-

ponent parts of the new organization met in convention in the fall of 1938 and formed a permanent federation, known as the Congress of Industrial Organizations. This name perpetuated the distinguishing initials, CIO All efforts at reconciliation having failed, there are now two separate federations of labor in this country. Membership in the two has been running about even; paid-in members of the AFL reached 5,939,020 in August 1943, and the CIO claimed 5,285,000 in November of that year.[8] Several large national unions and a number of local unions have remained independent. The major railroad brotherhoods never joined either federation, but the railway clerks are affiliated with the AFL. Organizations of postal workers and other federal employees are usually independent.

Two significant trends are reflected in the rise of the CIO: (1) The breakdown of crafts and specialized skills in industry and the increasing importance of mass production; and (2) the entrance of a strong labor movement into politics. The CIO openly supported Franklin D Roosevelt in 1936, developed Labor's Non-Partisan League, and succeeded in gaining control of several important local government bodies. Later it created the Political Action Committee (PAC), which was a potent factor in the presidential election of 1944. These trends are antagonistic to the traditional principles of the AFL. What the result of the struggle will be is difficult to forecast, for the competition between the two organizations has had both favorable and unfavorable aspects. Certainly the competition has intensified the drive for new members. Both groups have engaged in a major attempt to organize industry in the southern states. The CIO, as a young, fighting organization, has put new life into the labor movement. However, the loss of a united front can have serious consequences. Jurisdictional disputes have become serious, with each organization trying to invade the other's territory. AFL pickets before CIO union plants (or vice versa) cannot but discredit labor in the eyes of the public. A struggle for power by strong leaders can easily lose sight of the primary objective of all organized labor—the advancement of the welfare of the average American worker.

Objectives of Labor Unions.—Broadly speaking, unions aim to obtain higher wages, shorter hours, better working conditions, and greater economic security for their members. As a means to these ends they seek first of all the establishment of collective bargaining procedures. Through such bargaining they negotiate with employers for standard wage scales, maximum job security, and favorable working rules. We must examine particularly the philosophy of collective bargaining, of the standard union wage scale, and of job security, because they constitute the core of the labor movement.

Unions also bring other, secondary benefits. They exert pressure for social and economic legislation The members of the organization can get together

[8] Data from H A Mills and R L Montgomery, *Organized Labor* (1945), p 196

to talk over their mutual problems. Unions frequently act as beneficial societies, extending to their members insurance against accidents, sickness, and unemployment. Reserve funds are accumulated to finance possible strikes in the future. Often the union office serves as an employment bureau for the trade. Educational, social, and recreational activities are fostered. To sum up, the union organization is always available for any activities in which the interests of laborers collectively are involved. In several cases they have gone so far as to establish their own banking institutions.

While some of these objectives are laudable, union members are quite as likely to be selfish as idealistic in seeking to improve their lot. In this they do not differ from other human beings. Like employers, they object to competition from their fellows; therefore, they often seek to obtain monopolies in their several occupations. And when they have monopoly power, they are just as likely to abuse it as are capitalistic monopolists. They frequently seek to better their own economic position at the expense of their fellows by membership restrictions, by the exclusion of Negroes and other racial or religious groups from membership, and in other ways. So, while in the beginning unions were organized to protect the workers against intolerable abuses, as they have gained power they have often become in themselves abusive, so that society now sometimes needs protection against them.

Collective Bargaining.—A single individual facing his employer is at a very distinct disadvantage. He must compete with his fellow workmen for a job and, under the stress of that competition, he may drive a very bad bargain. His labor is perishable; every hour lost is lost forever, and he must therefore work continuously, or the family income suffers. Unlike a commodity such as wheat, labor power cannot be stored in the hope of a better future price. The worker also lacks knowledge of the market for his labor, and knows little of the conditions of the trade in which he seeks employment. By membership in a labor organization these disadvantages are at least mitigated. Collective bargaining equalizes the power of the two parties to a labor contract by substituting a collective agreement for the individual contract. Through collective bargaining, competition for jobs is reduced, and union business experts represent the worker during the crucial period of negotiation. The feeble demands of individual workmen thus become strong, collective demands, backed by real economic power. The potential threat to injure an employer by a strike, or even political pressure, cannot be ignored. The right of collective bargaining is the very heart of the whole labor movement, for it is the medium through which all the plans for higher wages, shorter hours, and improved general conditions of employment are translated into positive action.

The Standard Wage.—Just as price-cutting can destroy a business enterprise, wage-cutting can depress the workers' income in a highly competitive

labor market. The answer of organized labor to this form of price competition is the establishment of a uniform union wage scale. It is difficult to accomplish this uniformity in rates of pay, for every worker has a different capacity for efficiency in production, and the work to be done varies widely from job to job and from plant to plant. The union therefore tries to standardize hours of work, individual outputs, and working conditions. Standard pay for standard work ranks at the very top of union objectives. And, of course, the aim is to make the standard wage in every case as high as the employers can be induced to pay.

The advantages of standardization, from the viewpoint of organized labor, are obvious. Collective bargaining negotiations can be conducted on an unambiguous basis. The masses of workers can be welded into a cohesive unity, for the welfare of each individual becomes inseparably merged with the welfare of the group. But a high price is paid for these gains; the area of competition and freedom of enterprise is much restricted. Men who cannot earn the standard rate must remain unemployed or force wage rates still lower in the shrinking number of unorganized industries. The more efficient man has less incentive to use his full powers, and management is handicapped in adjusting pay earned to output produced. Imperfect competition and monopoly are becoming established in the labor market in much the same way as they are in the commodity markets, as described in Chapter III. With labor unions spreading in the mass production industries, controlled wages and controlled product prices are replacing the competitive prices of free markets. In the automobile industry, for example, collective bargaining negotiations bring together employer representatives of a highly concentrated industry and labor representatives of a single, giant industrial union, having a total membership of over one million workers. This trend may be both desirable and inevitable, but labor should recognize that it is following exactly the same techniques that it has bitterly opposed, over a long period of years, on the part of business enterprise.

Job Security.—A third major category of labor objectives can be called *job security*. Seniority systems, union control over hiring and "firing," and the dismissal wage are some of the devices used here.

The number of trade agreements containing seniority provisions has been steadily increasing. Although a number of well-established seniority systems have been operating for years (namely, in the railroads), they are more common in the recently organized mass production industries, such as automobiles, textiles, and steel. The principle of seniority is that employees with the longest service in a given firm or plant should be given preferment over newer employees, in matters of promotions, transfers, layoffs, and similar things important to the worker. The principle of seniority is defended as a means of protecting older workers from the competition of youth in industries in which speed and dexterity, rather than skill, are the principal requirements

It also gives labor some protection against the impact of fluctuating production; for the longer period of service to the credit of an employee, the greater is his continuity of employment, and, in case of a short layoff, those with seniority are assured of reemployment at the earliest opportunity. It is argued against the system that it so handicaps the employer in weeding out his less efficient workers that, over a span of years, he may find himself overburdened with older employees. It is also claimed that an employee so well protected lacks incentive to give his best effort to his job. Unhappy situations often face the union itself when a controversy over seniority requires a decision for one man against another. Returning army veterans created this problem on a wide scale after both world wars.

Union control of hiring and discharge is illustrated in an extreme form in the brewing and clothing industries. Before the Labor Law of 1947, new employees in the brewing industry must be obtained from the union. Once employed, workers must be released in slack periods in reverse order of hiring. An employer in Chicago's clothing industry must apply to the union's employment exchange, and he was allowed to draw from the open market only if the union was unable to supply the kind of worker required. If the worker so obtained was retained for two weeks, he could not be discharged thereafter except for cause, as defined by an impartial chairman set up as a review official. Such extreme control is not general, but most union agreements with employers contain some check upon hiring and discharging.

The dismissal wage has not been as common, but examples of it can be found in railroad, clothing, and newspaper labor organizations. It represents the most clear-cut expression of a growing feeling among workers that they have a sort of property right in their jobs. Over a span of years a man "invests" something in acquiring a skill, adapting himself to the requirements of a specific plant, adjusting his living to the locality (perhaps by buying a home), and generally fusing his economic existence with the firm for which he works. He believes that he has acquired rights that cannot justly be treated lightly, so he looks upon a dismissal wage as a form of indemnity for the infringement of those accumulated rights. The demand for a dismissal wage will unquestionably spread as organized labor gains in power.

Limitation of Output.—The businessman who experiences wide variations in the readiness of the market to absorb his product turns towards every device at his disposal to accomplish what he calls market stability. This is one of the pressures leading to collusive agreements and outright monopoly. Organized labor has developed various policies designed to accomplish the same objective in the labor market—that is, to provide some measure of job security. These policies aim toward direct limitation and regulation of output. The introduction of new machinery and new technology has been vigorously resisted by unions, on the ground that such dynamic changes not only reduce the number of hands needed in a given operation, but at the same time

reduce the level of skill required of the workers who are employed. The classic case is the fight of the glass blowers against the mechanization of their industry. The struggle over the introduction of the linotype machine in the printing industry is also well known. The latter dispute was finally settled by an agreement that the same standard rate should be paid to both hand and machine composers. Today union leaders realize the importance of technological progress in raising the standard of living; therefore the more far-seeing among them have changed their policy in this matter. Now, instead of objecting to innovations, they are more likely to insist that they should have a voice in deciding when the new devices are to be introduced, the number of machines to be operated by one man, and the new scales of pay that are to prevail. However, this is still a restrictive control; and there are many other union policies designed to limit the performance of the individual worker. For example, in some localities a newspaper may use the matrices supplied by another office, but after publication the copy must be reset, proofread and corrected. In certain cities plumbers will not use factory assemblies without detaching and reassembling parts on the job. Union rules may require that brass, nickel, or other pipe must be prepared on the job. The ratio of apprentices to master workmen may be controlled, to retard the expansion of the available labor supply. Painters restrict the size of brush that may be used, and they frequently circumscribe the employers' right to use the spraying method. Local unions may limit the number of bricks that can be loaded in a day, or the type of tools that can be used in spreading mortar on bricks. Rules such as these are frequently made at the local union level and apply only within the local's jurisdiction.

The reduction of efficiency by output limitation is a serious charge against labor organizations, but there is much to be said in labor's defense. The economist, looking at what he calls long-run adjustments, tells the worker that only by increased output, the introduction of labor-saving devices, and generally increased efficiency can the standards of living of labor be improved. In the long run the demand for labor is not limited, and wage-earners share in the benefits of social progress brought about by dynamic changes in industry. The economist often forgets, however, that the worker lives in the short run and not the long run. The philosophy of limitation of output, in so far as the short-run period is concerned, is sound in many respects from the individual worker's viewpoint. Maladjustments in industry, seasonal trades, and variations in the demand for a product lead to irregularity in the employment of labor, and by working slowly the individual job upon which the worker is engaged may be made to last longer. The introduction of new machinery involves the same problem. In the long run workers gain, but that is of little satisfaction to a skilled worker who is plunged to a low standard of living through the invention of a new device that permits an unskilled worker to take his place. It is unfair to ask one small group of workmen to bear the

full burden of achieving social progress. Industry must attack the basic problem of fluctuating employment and the endangering of a worker's economic position by dynamic industrial changes, if the limitation of output philosophy is to be banished from the worker's mind. The limitation of output is not solely a problem of organized labor; the practice is widespread in unorganized industry. This fact indicates that the problem is not one of combatting a carefully calculated policy of a few union leaders, but it is a problem growing out of the individual workman's instinctive reaction to the conditions under which he finds himself employed. If we are to expect labor to abandon the practice of limiting output, we must perfect social arrangements that will protect the worker in the security of a good job at fair wages.

The Legality of Labor Organizations.—The modern labor movement had its origin in England, and it is therefore in that country that the legal battle over the right of labor to organize was fought out. Other countries, facing industrialization much later, relied largely on the precedents built up in England. At first labor organizations were considered illegal there. Unions were established primarily to permit labor to bargain collectively with employers for benefits that would perhaps not otherwise be obtained. This was interpreted to be conspiracy on the part of the workers and therefore contrary to the common law. The courts declared all collective action on the part of wage-earners illegal. In the early part of the nineteenth century special legislation was passed outlawing labor organizations. By 1824 and 1825 sentiment had begun to change and the restrictive laws were repealed. Gradually recognition was achieved, and by the latter part of the nineteenth century a series of laws was enacted declaring labor organizations legal and exempting them from the conspiracy charge under the common law. In 1901 an unexpected court decision, later sustained by the highest court of appeals, the House of Lords, levied a damage of over £200,000 against the Amalgamated Society of Railway Servants on the ground that their strike against the railroad had resulted in damage to railroad property. This decision cast a doubt upon the legality of labor organizations once more, since it would be impossible for labor organizations to guarantee the conduct of individual members. The result was the passage of the Trade Disputes Act of 1906, which provided that neither unions nor union leaders could be charged with liability for wrongful acts committed by individual members during a strike. The individuals committing the criminal acts were of course subject to prosecution; their criminal liability remained unchanged. This act forms the cornerstone of the legality of modern labor organizations and has been subsequently further developed.

In the United States the precedent of England resulted in labor organizations being considered legal practically from their beginning. There were a few adverse court decisions, but their influence has not been very great. In general the union was considered legal, and this has been true in

a broad sense down to the present day. Several states, however, have passed laws against the syndicalistic activity which has characterized the policy of a few radical labor organizations. The question of legality in the United States has dealt largely with the methods used by labor organizations rather than with the legality of the organizations themselves. Federal legislation in 1935 and 1947 definitely protects the right of labor to bargain collectively, but places certain limits on the activities of labor unions. This legislation will be described in Chapter IX.

Employers' Associations.—In addition to the development of integration in industry, making possible unity of action among employers, there have developed associations of employers for the specific purpose of presenting a united front to organized labor, and resisting the growth of unionism. The structure of these organizations is quite similar to that of labor organizations. The local craft union has its counterpart in the local craft employers' association, such as the Chicago Team Owners Association. The industrial union has as its parallel the industrial employers' association, such as a local newspaper publishers' association or an association of coal operators. There are also asssociations of employers in closely allied industries, such as the National Metal Trades Association. In many cases city, state, and national federations of employers' associations have been formed, just as we found in the case of labor organizations. The Chicago Employers' Association, the Illinois Manufacturers' Association, and the National Association of Manufacturers furnish excellent illustrations. Employers' associations in the building trades also have local, state, and national federations.

From a functional viewpoint employers' associations are of two general types—businesslike conciliatory associations, and militant associations. The businesslike employers' associations are formed primarily to bargain effectively and collectively with wage-earners in order to gain stability for the trade by establishing amicable industrial relations. They seek to protect the interests of employers, while recognizing at the same time the rights of the laborers. The best examples of such organizations are those in the building and printing trades. Some authorities would also include the coal operators association under this head. The militant type are often associations of the business type that have found through experience that the unions in their field did not live up to their agreements. They have therefore developed a very antagonistic attitude toward the unions. In other cases they are formed at the start for the specific purpose of killing the organized labor movement wherever possible. In many cases they are directed primarily at the demand of labor that only union men be employed in a plant. The metal trades associations and the National Association of Manufacturers have this militant attitude. Usually the employers' associations are much less permanent than are labor organizations; they are constantly being formed and disbanded.

The Philosophy of Employers' Associations.—Professor Hoxie admirably summarized the underlying assumptions, theory, and attitude of the employers' associations, more particularly those of the militant type. They are: "That a natural harmony of interests prevails in society and therefore the unions are to be restrained when they use coercive methods; that the employers' interests are always identical with the interests of society and therefore unionism is to be condemned whenever it interferes with their interests; that the interests of the worker and employer are harmonious, and therefore when the unions oppose the employer they are misled by unscrupulous leaders and are to be condemned; that the employer gives work to the laborers and therefore they are ungrateful and immoral and to be condemned when they combine to oppose him; that the employer has an absolute right to manage his *own* business to suit himself as against his workers, and therefore the unions are to be condemned when they interfere in any way with that right; that the business is his, an absolute property right, and to compel him to bargain with men collectively, instead of as individuals, is to compel him to deal with men not in his employ, with an irresponsible committtee, and to assert a voice in the matters of hiring and discharge, the conditions of employment and a right to the job and the trade. . . ."[9] All this goes back to the basic nature of property rights. Employers' associations seek to carry the philosophy of *laissez-faire* in industry as far as possible in the face of a growing social conscience on the part of the general public. The trend towards more labor legislation, legalization of labor unions and their methods, increased government control of industry, and similar activity, indicates a development which the employers believe to be unsatisfactory both to themselves and to society. In fairness to employers' associations we can say that recently there has been a growth of what is comparable to the uplift philosophy in labor unions. Many employers' associations are cooperating wholeheartedly with the unions, and seeking by experiments and publicity to heal the breach in their respective industries.

C. Industrial Conflict

The Strike.—When an industrial dispute develops and amicable settlement is found impossible, industrial conflict or industrial war begins. The strongest single weapon the workers possess for such conflict is the *strike*. The strike is a collective cessation of work by wage-earners for the purpose of enforcing a demand made upon an employer. The demands may be defensive in nature in that the wage-earners may be seeking merely to maintain existing conditions of employment that are being threatened, or the demands may be offensive in that an attempt is being made to improve upon

[9] Robert F. Hoxie, *Trade Unionism in the United States* (1920), pp. 195-196.

existing working conditions. The effectiveness of t[illegible]ke d[illegible] the ability of the union to cripple the employer's bu[illegible] The em[illegible] faces a heavy financial loss as a result of the overhea[illegible]f the idle [illegible] and the stock of raw materials and semifinished go[illegible] faces the inability to meet contracts for delivery and [illegible] trade to competing firms during the period of shutdo[illegible] of the employer must therefore be towards securing ne[illegible]loyees. [illegible] Since this constitutes a threat against the strikers' ability to recover their [illegible] after settlement of the dispute, the strikers devote most of their attentio[illegible] the prevention of the use of new employees—strike breakers or "scabs," as they are called. Right here one finds the cause of most of the violence on the part of both employers and employees that frequently accompanies labor disputes. Sometimes, to aid the strikers, union workers in other industries are called out in a *sympathetic strike,* even though they may at the time have no grievance with their own employer. There is even the possibility of a *general strike* of all the trade unionists in a given area. The great strike in Seattle in 1919 and the strike in England during the spring of 1926 were both widespread enough to be called general strikes. The purpose of a general strike is to bring all forms of economic activity to a standstill. In 1937 there was an epidemic of the sit-down strike. Workers with grievances would simply fold their arms and refuse to leave the plant. This new technique proved to be an exceedingly effective weapon in preventing the employer from continuing production. There is a grave risk of damage to life and property if large numbers of individuals are forcibly evicted from a plant.

Compulsory labor is slavery; therefore individual wage-earners clearly have the right to quit work if they care to. Since this is the case, it would appear logical that a similar right must exist for wage-earners collectively. This reasoning, however, is really rather far from the point at issue. A strike is not simply a man quitting work. The real element present is the effort to enforce a demand on the employer. A striker is not quitting work permanently; he expects to return and will resist to his full power any effort to prevent him from returning when he so desires. A strike is simply a concerted effort to shut down a plant to enforce a demand. Should the demand be one directed towards the improvement of the workers' condition rather than towards injuring directly the employer, the strike is generally considered legal by the courts. Strikes for shorter hours, higher wages, or better working conditions are almost always considered legal. On the other hand, strikes that take on the nature of combinations and threats directed against an employer are often declared illegal. The underlying principle applied by the courts appears to have hinged upon the question of motive.

The Labor Act of 1947 placed new limitations on the right to strike. That law designated the following labor practices as unfair and illegal: (1) strikes to enforce secondary boycotts; (2) jurisdictional strikes to compel an em-

ployer, [illegible] union against another in a dispute between them as to which [illegible] ion, [illegible] ve the exclusive right to do certain work; (3) strikes called [illegible] to [illegible] ting periods prescribed in the act for disputes falling [illegible] ain s[illegible] categories which are subject to a procedure of gov- [illegible] estiga[illegible] blished under the law. This last restriction will [illegible] in mo[illegible] in Chapter IX. The law also made it illegal for [illegible] of the Unit[illegible] States, or any agency thereof, to participate in a [illegible] ke [illegible] the government.

There is a strong tendency of late to look with disfavor on strikes in public utilities, government services, and in all cases where nationwide disruption of the economy is threatened. The legal status of the sit-down strike has not yet been definitely established, although practically all the federal and state courts have held that it is illegal and that an injunction ordering workers to evacuate the premises is proper. Several states have laws limiting sit-down strikes.

Picketing.—We have said that the success of a strike depends on the ability of the workers to prevent others from being employed to take their jobs. Picketing is the attempt on the part of the strikers to prevent others from taking their places and to induce those who have not gone out on strike to cast their lot with the strikers. Usually representatives of the strikers are stationed at entrances of the plants involved. They carry banners stating their side of the case and try by persuasion to prevent new employees from keeping the plant in operation. Often this picketing degenerates into threats and violence for the purpose of intimidating workers remaining on or entering into active duty.

The general position of the courts is that picketing is legal in labor disputes unless it involves violence or is carried on away from the scene of the dispute. Where the number of pickets used is so large that access to the place of business is made impossible, the legality is not clear. Injunctions have been issued under these conditions, and state police have been used, but at present there is no clear decision on the point by the Supreme Court. The practice of mass picketing has increased and some decision must be made as to its legality.

The Boycott.—The boycott in industrial conflict refers to the refusal of wage-earners to have dealings with, or to patronize, a business organization against which organized labor has a grievance. There are several varieties of boycott: (1) refusal of workers to purchase the products of their employer; (2) the persuasion, by workers with a grievance, of other union men, and sometimes of the general public, to withhold patronage; (3) the persuasion or compelling of a third party to refrain from buying things of which the workers themselves are not purchasers—machinery, for example. This third party may be forced to withhold patronage by the threat of a boycott of his product (goods made by the machinery for instance) or by a threat to

call a strike in his own plant, should his plant be unionized. The first of these is sometimes called a primary boycott, and by some writers the second and third are included under the term secondary boycott.

The first type of boycott is clearly legal. A worker can purchase where he likes and is under no obligation to purchase from his own employer if he does not so desire. Secondary boycotts have frequently been declared illegal in the past, and the Labor Act of 1947 specifically outlaws such boycotts in the area subject to federal jurisdiction. A court test will be necessary to clarify the scope of this restriction, for court decisions hitherto have not been clear as to the constitutionality of this kind of government intervention.

The Union Label.—The union label is a device which seeks to stimulate the sale of products made by union labor by attaching an identifying mark of some sort. The label is supposed to signify that the commodity was made by union labor and that all union standards of employment, such as absence of child labor, sanitary conditions of work, union rates of pay, and similar matters, have been complied with. It is hoped that the position of the organization is strengthened by permitting union leaders to point out to employers that the union is stimulating purchases of goods. The practice of using a union label originated in the United States and has spread over almost the entire world. It is now one of the important policies of the American Federation of Labor, but many doubt its value. Workmen, it is claimed, will buy where goods may be purchased at the lowest price rather than where goods are union made. The use of the label is legal; it is considered a quasi-trade mark. Many states have passed laws declaring the practice legal, and the United States Supreme Court has also agreed to its legality.

The Closed Shop.—The primary function of labor organization we found to be the establishment of collective bargaining with employers. Bargaining strength is to a large degree dependent on the percentage of men in the plant or shop who are union men—that is, members of the organization. If very few employees of a shop are members of the union, it is difficult, if not impossible, to establish standard wage rates and standard working conditions through collective bargaining. Full bargaining power requires that nearly every man should be a member of the organization, so that a threat to strike is a threat to close down production completely. Labor organizations therefore have demanded some form of closed shop, whereas an open shop is usually preferred by employers. An *open shop* is one in which both union and nonunion men are employed, working side by side, management supposedly making no distinction between them. A *closed shop* may be either of two different sorts—a closed shop with a closed union or a closed shop with an open union. The latter type is now known as a *union shop*. A closed shop with a closed union is one in which the employer can hire only men who are already members of the union; when he seeks new employees he must choose them from the list of union men available that is

submitted to him by the union. A union shop permits the employer to hire anyone he pleases, but if a nonunion man is employed he must join the union within a stated or reasonable time, so that every employee will become a member. Sometimes there is used a midway form of closed shop, generally called a *preferential union shop,* in which the employer is bound to employ union men if they are available at the union wage, but if such men are not available he is privileged to seek other employees in the open market.

Employers have been more opposed to the closed shop policy than to any other activity of organized labor. The closed shop, they claim, takes away the right of the nonunion man to seek employment and forces him, even against his will, to become a member of a labor organization. This is considered undemocratic and against the theory of liberty and freedom for which this country has always stood. Employers also object that they feel their hand is constantly being forced; the pressure of organized labor is continually applied to them. A closed shop thus interferes with the personal liberty of the employer. He cannot manage his business in his own way and, since he believes that in every business enterprise the employer should be completely in charge, operating his own business as he sees fit, the efficiency of the enterprise is threatened. With the right to hire and "fire" limited, discipline is relaxed. A monopoly of labor is set up demanding a wage above the competitive rate in the open market. As a result of restrictions in union membership, the standardized minimum wage tends also to become the maximum, since the employer is unable to pay each man on the basis of his individual efficiency, and the wage rate in general tends to agree with that which the least capable worker can earn. This has the effect of discouraging capable workers from exercising their full talents. Finally, employers charge that the unions should sell their idea of unionization to the wage-earners first. If this is accomplished they will not need compulsion as a means of getting members. The railroad brotherhoods are perhaps the strongest unions in the United States, and they developed under open-shop conditions.

To these arguments in favor of the open shop and against the closed shop, organized labor makes a vigorous reply. It is claimed that the open shop in practice results in a new form of closed shop—a shop *closed against the union.* An open shop permits the employer to break up the labor organization if he so desires. Promotions, easy jobs, and other forms of favoritism can be offered nonunion men. In cases of layoff union men can be discharged first, and when rehiring is necessary, nonunion men may be given the preference. Gradually the shop becomes a nonunion shop, and employees who are members of labor organizations find it to their advantage to enter the nonunion ranks. The resulting breakdown in the union reduces the collective bargaining machinery to impotency, and the struggle for standard hours, rates of pay, and working conditions becomes a losing fight. Labor

leaders also point out that they are expected to enforce discipline over the members and to guarantee that all agreements that are made with employers will be carried out This is impossible unless there exists some method of disciplining members, and the most important method of bringing a member into line is to threaten the security of his job. The closed shop enables the union leaders to make agreements and then assume the responsibility for their enforcement. The employer also gains under the closed shop by the elimination of cutthroat competition in his industry Since all competing firms are placed in the same position in their relation to labor by the establishment of the closed shop, a better *esprit de corps* is created, and the stability given the industry gives an employer the assurance that he will be able to fulfill all contracts made with the general public Lastly, organized labor has little sympathy with the nonunion man, for from its viewpoint he obtains all the advantages brought about by organized labor without himself contributing towards the costs of the campaign through which the gains were won

These conflicting arguments, combined with the fact that the charges of unfair practice made by both sides can be supported by evidence taken from the actual experience of industry, make it difficult to come to a definite conclusion as to the merits of the closed shop Many responsible writers believe firmly in the open shop and direct their attention towards devising methods to prevent the employer from taking unfair advantage of the opportunities given him under such conditions Certainly a union shop is not open to the charges of monopoly that can be levied against the closed shop with the closed union. The weight of authority seems to be in favor of the union shop This form obtains the advantages sought by organized labor without the more serious disadvantages

The Labor Act of 1947 adopted this compromise position. Under its terms, closed shop (with closed union) agreements are prohibited; but union shop agreements are permitted if a majority of the employees vote in favor of a union shop and the employer agrees to it. One-fourth of the states have legislation restricting or prohibiting various forms of the closed shop, and the federal law provides that in those states where the state law is more restrictive than the federal one, the state provisions shall apply

The Checkoff.—A number of union agreements contain provisions for the checkoff, which authorizes employers to deduct union dues and other assessments from the wages of union members. This arrangement has been used by both company and outside unions. Usually it is associated with the closed shop In effect, it transforms the employer into a tax collecting agency for the union. Although the device has been used by many locals, the only major industries in which it is a prevailing practice are coal mining and hosiery manufacture. Under the Labor Act of 1947, union dues cannot be deducted from the pay of an employee unless he individually authorizes it

in writing. The intent of this is to restrain the use of the checkoff, but union pressure may make this restriction of little importance in practice. In the railroad industry the checkoff has been declared illegal under the Railway Labor Act of 1934, which forbids railroad employers to deduct dues from workers' pay for either company or outside unions.

Sabotage.—Another weapon which has been employed by labor on occasion may be described by the term *sabotage*. This comes from the French word *sabot,* a wooden shoe. Originally it referred to the dropping of such a shoe into the employer's machinery to damage it, but it has since come to have a much wider meaning. It now covers a number of activities, ranging from "soldiering" (that is, deliberately slowing down) to malicious destruction of plant and equipment. Sabotage, as a means of industrial warfare, finds its strongest advocates among revolutionary unions. The more conservative unions have not generally made much use of it.

Employers' Methods: The Discharge and the Lockout.—In his right to employ or discharge workmen as he sees fit, the employer has a very powerful weapon for the control of labor in his plant. If an open-shop condition prevails, he can hire enough nonunion men to protect his shop from the influence of union control. He can also restrain his employees from active participation in union work by discharging on some pretext any individual whom he suspects of working actively in the union's behalf. As we have just seen, it is with the thought of curbing this power possessed by the employer, that the union has been so emphatic in its insistence that the closed shop is essential to the existence and development of organized labor.

The formal act of the employer in forcing a demand on his employees is the lockout. A lockout is the act of closing a business enterprise by an employer for the purpose of enforcing a demand on the employees by causing them to be thrown out of work. It is the employer's counterpart of the strike. Both the strike and the lockout cause a stoppage in production, and the economic consequences are the same in both cases.

The Blacklist.—The blacklist is the employers' answer to the boycott. The blacklist refers to the practice of individual employers and employers' associations of maintaining a list of employees who have proved offensive by reason of their union activity. It is, in effect, a boycott of organized labor, especially of its leaders—both officials and local organizers. Some industries maintain elaborate records of employees both desirable and undesirable from the employer's viewpoint. Many states have passed laws against the practice of blacklisting, but it is so difficult to obtain evidence that the laws have not proved very effective. The problem is especially difficult to handle because the employer has a right to know something about the man he hires or discharges, and under cover of securing this legal and justifiable information he can discriminate against the union man. Under the Labor Relations Act of 1935 such discrimination is now forbidden.

Yellow-dog Contracts.—As a protection against the growth of trade union influence, some employers have required a new employee to sign a contract stating that he is not a member of any labor union and that he will refrain from joining one during the period of his employment. These have been called "yellow dog" contracts and have been bitterly fought by labor leaders. Several states have passed laws prohibiting employers from using such contracts, but with little effect. Decisions of the United States Supreme Court have held that an injunction can be issued against attempts to organize workers who have signed such agreements as a condition of employment.[11] These decisions legalized the yellow-dog contract, and gave the employer a powerful weapon in the form of the injunction. As will be noted below, the Norris Act of 1932 declared the yellow-dog contract to be contrary to public policy. The National Labor Relations Act of 1935 contained provisions outlawing such contracts by firms engaged in interstate commerce.

The Company Union.—A device formerly used by a considerable number of employers to avoid dealing with outside unions was the company union. This was a union, organized under the sponsorship of the employer, which included in its membership only employees of the company in question. It had for its objectives the settlement of workers' grievances on matters pertaining to wages, hours, and conditions of employment by amicable dealing with the employer. Since it was sponsored by the latter and often subsidized by him, it was usually nonmilitant in character, and worked by methods of peaceful conference rather than by strikes and other kinds of coercion. Organized labor has generally been opposed to unions of this kind because of their domination by management. Often these unions were associated with one of the various employee representation plans which will be described in the following chapter. Company unions have been practically outlawed by the National Labor Relations Act of 1935 (which will be discussed in Chapter IX), but some of them have survived as independent locals. There are many other locals, not affiliated with any of the large national organizations, that are not in any sense company unions.

The Speed-up.—An employer weapon directly opposed to union policies of output restriction is the speed-up. It takes the form of increasing the speed of machinery, giving each worker more machinery to tend, paying incentive bonuses for large output, or hiring especially fast workers as "pace setters." Sometimes the speed-up is introduced by the employer to frustrate union efforts to limit production; but on the other hand, the unions may adopt output limitations to defend themselves against the speed-up. There have been abuses on both sides here. What is needed is a reasonable willingness on both sides to accept a rate of speed that gives the employer an hon-

[11] See *Hitchman Coal and Coke Co. vs. Mitchell*, 245 U. S. 229 (1917).

est day's work from his employees, without subjecting the latter to injurious strain.

The Injunction.—The use by employers of the legal device known as the *injunction*, as a means of preventing strikers from interfering with the continued operation of their plants during a strike, has aroused bitter opposition on the part of organized labor. An injunction is an order of a court of equity restraining the performance of certain specified acts, thereby protecting the persons seeking the injunction from irreparable damage. When an individual disobeys the dictates of a court issuing an injunction, he is chargeable with contempt of court, and is subject to a penalty fixed by the judge without the privilege of trial by jury. As a device for the protection of property or person, it is admittedly a valuable part of our legal machinery and has long been successfully used. The carrying over of the principle into industrial relations is of questionable merit. The right of property protection has been interpreted by the courts to include the right of employers to access to markets, freedom in employing labor, freedom in purchasing necessary goods, and similar activity necessary to maintaining an enterprise as a going concern. In the famous Buck Stove and Range case, the writ issued by the court enjoined officials of the American Federation of Labor, officials and members of affiliated unions, friends, sympathizers, counsels, conspirators, and co-conspirators, from referring in any way to the dispute between labor and management. It went so far as to enjoin anyone from referring directly or indirectly to the dispute by the printed, written, or spoken word During the bituminous coal strike in 1919, Judge Anderson of the United States District Court at Indianapolis, issued an injunction requested by the Department of Justice, restraining the officials of the United Mine Workers of America from calling a strike and from distributing strike funds.

The passage of the Clayton Antitrust Act in 1914 was thought to give protection to organized labor against unrestricted use of the injunction, since the law provided (1) that labor was not a commodity or article of commerce; (2) that labor organizations were not to be considered illegal combinations or conspiracies subject to the federal antitrust laws; and (3) that preliminary injunctions were not to be served without notice to the opposing party, nor was a temporary restricting order to be issued without similar notice unless it was clearly evident that irreparable injury would result if immediate action was not taken. As interpreted by the courts after its passage, the law failed to give the anticipated protection to organized labor To correct this situation the Norris Act (Federal Anti-Injunction Law) was passed in 1932. This law provides that yellow dog contracts are contrary to public policy It forbids all subordinate federal courts to issue injunctions that enjoin individuals or groups from (a) ceasing or refusing to perform any work or to remain in any relation of employment, (b) becoming or remaining a member of any labor organization or of any employer association

regardless of promises made in antiunion contracts, (c) paying, giving, or withholding strike or other benefit money, (d) assembling peaceably to act or to organize for the promotion of their interests in a labor dispute, and so on. Unions are liable for damages only upon clear proof of actual participation, actual authorization, or actual knowledge of actions of their members. Finally, the law contains many specific provisions relating to procedure, such as the right to the testimony of witnesses in open court, the right of appeal to a higher court, and the right of trial by jury in the usual case of contempt of court Several states have since passed similar laws. The Supreme Court of the United States in 1938 declared the Norris Act constitutional.

After the passage of the Norris Act, the higher courts limited their use of the injunction mostly to restrain physical violence in cases of mass picketing. However, the federal government, in exercising its authority over industrial disputes, has claimed at least partial immunity from the Norris law's jurisdiction. In 1946 the federal authorities used the injunction successfully to restrain strike action by the United Mine Workers, arguing that the Norris Act did not limit the right of the government to protect the public welfare Further relaxation of the restrictions contained in the Norris Act was embodied in the Labor Act of 1947, which authorized the National Labor Relations Board to demand injunctions to restrain certain labor practices designated in the law as unfair. The importance of this new policy will depend on the manner in which the Board makes use of this power, and on the interpretation of the power made by the courts.

The Conflict of Interests.—To the uninitiated, the problem of the proper relationship between capital and labor presents a rather perplexing picture. On the one extreme are those radicals, such as the Industrial Workers of the World, who declare that the interests of the employer and the employee are in direct conflict They regard all the gains of the capitalist as unearned and the result of exploitation of the worker At the other extreme are those who believe in the perfect harmony or solidarity of the present economic order This group considers capital and labor two halves of one unit, both of which are necessary and mutually dependent upon each other. Capital and labor are partners in the same enterprise with absolute mutuality of interests. The truth is that both groups are in part correct and in part wrong. There is a mutuality of interests between labor and capital. Without either, a business enterprise would cease to exist, and the more efficiently they work together, the greater the output and, consequently, the greater the income to be distributed between them There is, however, a definite conflict of interests inherent in the fact that the income *must be divided* between them. Any increase in labor's share, other things being equal, must decrease the share that accrues to capital, and vice versa. This truth is often obscured by the rapid increase in the total national income, so that workers of a certain

class may be receiving a constantly smaller proportion of the total output and yet be receiving a constantly increasing share in an absolute sense The problem shows itself most sharply in the employer's view that wages are part of costs and must be kept as low as possible, just the same as the costs of raw material and machinery. The fundamental basis of conflict, then, is found in the division of the product. The harmony of interests rests in the fact that both labor and capital are essential to production under modern industrial organization, and that both groups draw their income from the same pool. The larger the pool the greater the possible income each may receive.

To meet the conflict of interests, peaceful methods of settling disputes must be devised; and to carry out the harmony of interests, labor should join with capital in the management of industry. To these questions we must turn our attention in the next two chapters. However, labor must not be permitted to develop monopoly power beyond the reach of the law. Government must take a more active part as a regulatory agent.

Summary

The labor movement developed out of the intolerable conditions of employment that prevailed shortly after the Industrial Revolution. Evidences of industrial unrest in the contemporary world are found in prevailing high rates of labor turnover and in numerous strikes. The chief causes of labor unrest are the workers' state of mind, inequality of wealth, unsatisfactory economic and social conditions, demands by labor for a voice in management, and the feeling that government is hostile to labor.

To promote their interests more effectively, workers have organized themselves into unions which are permanent associations of wage-earners, having for their purpose the maintenance and improvement of the conditions of work. These unions may be classified according to structure as general unions, craft unions, and industrial unions They may also be classified on the basis of function, as business unions, free or uplift unions, revolutionary unions, and predatory unions. They may also be differentiated as open unions (with unrestricted membership) and closed unions (restricted membership) Membership in American labor organizations has fluctuated, but has increased markedly since 1933 There are two main federations of labor in this country, the American Federation of Labor (AFL), comprising mostly craft unions with conservative leanings, and the Congress of Industrial Organizations (CIO), consisting chiefly of industrial unions with more militant policies The objectives of labor unions are: (1) to establish collective bargaining; (2) to establish standard wage scales; and (3) to maximize job security As a measure of job security, many unions limit the output of their members. Labor unions are now legal in this country. Employers

have associations roughly parallel to labor unions for purposes of dealing with the latter.

The methods of industrial conflict employed by unions include: (1) the strike; (2) picketing; (3) the boycott; (4) the closed shop; (5) the checkoff; and sometimes (6) sabotage. Employers' methods of conflict include: (1) the discharge; (2) the lockout; (3) the blacklist; (4) yellow-dog contracts (now illegal); (5) the speed-up; (6) formerly, the company union; and, finally, (7) the injunction (the use of which is now limited by law). The basic conflict of interests between labor and capital rests in the fact that there is a limited amount of product to be divided between them.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

The origins of the labor union movement are developed by Sidney and Beatrice Webb in their famous *History of Trade Unionism* (1894). An American classic is R. F. Hoxie's, *Trade Unionism in the United States* (1920). See also Selig Perlman's, *History of Trade Unionism* (1922), and his *Theory of the Labor Movement,* (1928). J. A. Fitch, in *Causes of Industrial Unrest* (1924), gives an excellent analysis of that problem. Whiting Williams has studied unrest by living the life of a workman; he writes of his experiences in an interesting popular manner in *What's on the Worker's Mind* (1921), and *Mainsprings of Men* (1925).

Florence Peterson, in a short volume entitled *American Labor Unions* (1945), gives a concise summary of the growth, structure, and functions of labor organizations. *Organized Labor,* by H. A. Millis and R. E. Montgomery (1945), is an exhaustive presentation of the subject matter of this chapter, unusually rich in economic analysis. Richard A. Lester's *Economics of Labor* (1941) is a laudable attempt to give an analytical treatment of the labor field; it is easily the best general text available today. A comprehensive and standard text is C. R. Daugherty's *Labor Problems in American Industry* (1938). More recent is the book by E. E. Cummins and F. T. De Vyver, *The Labor Problem in the United States* (1947). R. R. Brooks has written a somewhat popular interpretation, *When Labor Organizes* (1937). Harry Henig's *The Brotherhood of Railway Clerks* (1937) is valuable as a careful study of the history and functioning of a very important and progressive union.

CHAPTER VIII

The Voluntary Approach to Industrial Peace

A. The Settlement of Industrial Disputes

Self-Regulation Versus State Regulation.—The disastrous effects of the great depression in the 1930's, and the even greater dislocations caused by the Second World War, have made the general public very conscious of the extent to which the government has come to permeate the whole American economy. Government intervention in labor problems has been an important part of this trend. A series of new federal laws now reaches out into almost every phase of employer-employee relationships. However, private industry has not left the problem of industrial relations entirely for the state to deal with. Most labor leaders and most employers are keenly aware of the heavy loss that attends open conflict, and they have therefore developed machinery to improve industrial efficiency and to help preserve the peace. In the vast majority of cases, settlement of the points of friction and conflict that necessarily arise in normal plant operations is reached by voluntary agreements. The radical union (or revolutionary union, to use Hoxie's terminology) unquestionably makes use of the strike as a weapon for attack on capitalistic society. The infiltration of communistic leadership into certain parts of organized labor has admittedly increased the use of this weapon for political purposes. But on the whole, the American labor movement remains conservative. Its unions, as business organizations, are primarily concerned with the goals of high wages and high standards of working conditions for the workingman. Many employers, on their part, not only coöperate with organized labor, but frequently experiment with new devices of their own for promoting improved labor-management relations.

In the present chapter we shall consider these voluntary methods, taking up, in the first part, the voluntary settlement of industrial disputes, and, in the second part, labor participation in management. Intervention by the political state will be reserved for consideration in Chapter IX. This separation of voluntary methods from state activity presents some difficulties of consistency in organization. For example, government conciliation boards are established to encourage voluntary negotiation and agreement. But there is a real gain in clarity of thinking if we recognize self-regulation on the part of labor and management prior to an analysis of the role of government.

Why Men Strike.—In the previous chapter we discussed the basic causes of industrial unrest and the primary objectives of organized labor. Industrial unrest comes to a head in the form of some specific demand by labor or capital, and a strike or lockout results if the parties to the dispute cannot come to terms. The most important specific demands which bring about the actual strike order may be grouped under seven classes. First, strikes for higher wages or against a reduction of the existing wage scale. Second, demands for shorter hours or, conversely, resistance against increases in the length of the existing working day Third, demands for union recognition (which have become of late the primary cause) Fourth, attempts to protect advantages already won and threatened by the employer, such as collective bargaining and the closed shop Fifth, demands growing out of unsatisfactory working conditions, such as methods of payment, transfer and discharge policy, promotion policy, and protection against accident Sixth, the perplexing disputes growing out of the conflict of jurisdiction between different unions The carpenters' and metal workers' unions fought a long jurisdictional battle when metal window frames were substituted for wood. New heating devices, such as steam and hot water heat, brought about a conflict of jurisdiction between steam-fitters and plumbers And seventh, the demands of labor for some voice in the management and control of industry.

It is often very difficult to discover just what the cause is behind any specific strike A workman may be discharged, and the union threatens to strike unless he is reemployed. The employer may assert the man was inefficient. On this basis a long strike may occur, and to the outsider it might look as if the efficiency of the discharged man was the issue, but to the disputants the real issue may be the union's right to dictate to management concerning the discharge of men. This fundamental issue might never appear on the surface, even after the strike was settled This difference between what *appears* to be the issue, and what really *is* the issue, detracts seriously from the usefulness of published hearings and decisions on labor disputes that are often offered as evidence of the problems industry faces. The real issue may never appear in the printed report.

Methods of Settling Industrial Disputes.—The effort to substitute peace for war in the conduct of industrial relations has given rise to several different forms of machinery for making amicable settlements. The five most widely used methods are direct negotiation, mediation, voluntary arbitration, compulsory arbitration, and compulsory investigation.

Direct negotiation (also called *conciliation* [1]) is the coming together of the

[1] Unfortunately, there is some ambiguity about the use of the term *conciliation* It is sometimes employed where *mediation* is meant For instance, the so called 'Conciliation Service" of the United States Department of Labor is really a mediation service The definitions of conciliation and mediation here adopted follow the usage of most of the standard treatises and textbooks on labor problems

disputants (organized labor and organized capital) for the purpose of discussing the question at issue and reaching a settlement peacefully without the intervention of a third party. The parties to the dispute themselves initiate the meeting and draw up the terms of the settlement.

Mediation is the tendering of good offices by some outside person or agency for the purpose of bringing the disputants together. If for some reason the disputants do not come together on their own initiative, a third party, such as some well-known individual or governmental agency, may attempt to bring the parties together and aid them in reaching a peaceful settlement through agreement. The third party, called the mediator, does not attempt to settle the dispute, but merely seeks to bring the warring factions together and create a conciliatory spirit that will permit the disputants themselves to work out a solution.

Arbitration is the submission of an industrial dispute to a supposedly impartial third party for settlement. If the disputants of their own accord elect to submit the dispute to a third party, the procedure is known as *voluntary arbitration*. If the disputants are compelled by governmental authority to submit their case to a designated third party, and the award made by the arbitrator must be accepted or a penalty suffered, the procedure is known as *compulsory arbitration*.

Compulsory investigation is investigation of a labor dispute by a governmental agency to make findings of facts and merits in the controversy, with legal prohibition of a strike until after the investigation is completed. Sometimes a settlement is recommended and given publicity; but this is not binding upon either party, and once it has been tendered, a strike can be called or a lockout order issued with full legality. This procedure might better be called compulsory arbitration with optional acceptance of the award.

These several methods of settlement may be divided into those voluntary in nature and those depending on compulsion, but there will necessarily be some degree of overlapping between the two categories. The first group includes direct negotiation, voluntary arbitration, and mediation. The second group includes compulsory arbitration and compulsory investigation. Since compulsion involves state intervention, the latter two methods fall within the scope of the next chapter.

Direct Negotiation and the Trade Agreement.—When the representatives of organized labor meet the representatives of organized capital in conference, the result of their collective bargaining is often a document known as the trade agreement. The trade agreement states wages, hours, and conditions of employment that are to prevail for an agreed period of time. At the expiration of that period another conference must be held and a new agreement made. By the Labor Act of 1947 the trade agreement has been given something of the status of a contract enforceable at law. It is the outward fruit of collective bargaining.

The procedure of drawing up a trade agreement is that of direct negotiation (conciliation) The provisions of the document formulated are usually a compromise between the demands made originally by each side. After the agreement has been signed, disputes in the trade are restricted to two kinds: questions of interpretation of the agreement arising in its administration, and the broader question of creating a new agreement when the old one expires.

Questions of interpretation may involve minor complaints of individual employees, or they may have broader implications applicable to a whole shop or plant. To care for individual grievances a system of shop union representatives is usually established The workers in each division of a plant elect one of their number as union representative, and all these representatives as a group constitute a plant union committee If an employee has a grievance, he notifies his union representative, and that representative takes the matter up with the foreman or other managerial official concerned in the case. In some unions (the building trades, for example) the shop representative must notify a union business agent and the latter really guides the negotiations. Thus it is the union representative (or business agent) who assumes responsibility for the run of-the mine individual cases of complaint.

A common method for the settlement of major questions of interpretation of the agreement is to include in the document provision for the creation of boards of conciliation. When a dispute arises, such a board is made up of an equal number of duly appointed representatives from each side In some cases a permanent board is appointed to take care of differences as they may arise. The permanent board has the advantage of being ready when the dispute occurs. When a new conciliation board must be appointed each time a dispute arises, the excitement of the moment makes it difficult for an amicable spirit to function properly. Where a board is selected, each side should always be equally represented on it, and no attempt should be made to conform to strictly legal or judicial procedure. In the rendering of the decision, a majority vote should not be sufficient, since it breeds dissatisfaction among the minority Where both sides are well organized the vote will, of course, be either unanimous or split evenly, each party voting as a unit.

Voluntary Arbitration.—Many trade agreements provide that if the conciliation boards fail to agree the dispute shall be submitted to an arbitrator or to a board of arbitration, both sides usually being bound in advance to accept the resulting decision. Sometimes a governmental agency may be called upon. Where a one-man arbitrator is selected, he should be an individual possessing the esteem of both sides. Sometimes he is appointed directly—perhaps even named—in the trade agreement, while in other cases each side appoints one arbitrator and the two so selected appoint a third. The advantage of three men on an arbitration board is that it enables the use of representatives having a technical knowledge of the industry from the angle of both sides, as well as the viewpoint of three different men The

disadvantage is that one man must finally decide if a mixed decision is given, and since the representative of labor and the representative of capital usually vote to support the claims of their own sides, the chairman usually casts the deciding vote. As in the case of boards of conciliation, a mixed decision is apt to breed dissatisfaction. This can be avoided in some cases by the rather unsatisfactory device of announcing the decision of the arbitration board as unanimous, regardless of the actual vote. The use of one man is usually conceded the most satisfactory. The technical knowledge of the industry necessary can be secured through the employment of experts from the ranks of the disputants. The term of service of an arbitrator or arbitration board should be short, to permit a change if loss of confidence takes place Long terms, however, do have the advantage of giving the arbitrators experience in settling disputes and opportunity to acquire satisfactory knowledge of the industry. An excellent compromise sometimes tried is the appointment of the board for a term of one year, with reappointment as often as confidence is retained.

The Nature and Kinds of Mediation.—There are many instances where the disputants find it difficult to come to an agreement unaided by outside help. This is especially true when a trade agreement expires and a new one is to be formed. Each side may publicly have taken a definite stand, and it may fear to retract, lest such retraction be taken as a sign of weakness If the stands so taken are diametrically opposed, it becomes difficult to bring the disputants together. Frequently both sides would be willing to back down slightly from their published position, if at the same time their faces could be saved. Here the mediator has his great chance to tender his good offices in bringing the disputants together and helping smooth the way toward a settlement The presence of the mediator also has the effect of notifying the disputants that other parties are interested in the solution of their problem

Two kinds of mediation are in more or less wide use. The first is what Professor Pigou has rather aptly called "the eminent outsider." The advantage of such an individual as mediator is that it flatters the disputants with their importance and gives a prestige that is helpful to their discussions. The second method is that of governmental agencies, such as the setting up of mediation boards or the authorization of certain departments—for example, the English Ministry of Labor or the United States Department of Labor—to assume duties as a mediator. The governmental agency as mediator has the power and ability to come in early in a dispute. The governmental agency also possesses great financial resources and has a permanence that is a valuable asset.

Experience with Voluntary Methods.—Direct negotiation and voluntary arbitration have long been widely used in England, having first developed in the hosiery and glove making industry and the building trades. Mediation by men prominent in public life has also been used extensively to settle im-

portant strikes. In the United States voluntary methods have not been so popular, although there are some examples of their success The railroad brotherhoods have operated very successfully under a trade agreement for many years. The Interstate Joint Conference of miners and operators, the trade agreement adopted by a joint conference board of the Building Construction Employers' Association and the Building Trades Council of Chicago in 1921, and the clothing trade agreements have been reasonably successful.

The Merits of Voluntary Methods.—Direct negotiation as a method of settling disputes has many decided advantages in its favor. It does not involve coercion, and therefore a good feeling can prevail. Since the parties to the dispute themselves settle their difficulties, the settlement is made by those who know the most about it—the participants. The one great disadvantage is its inability to cope with a dispute in which both sides have taken a position which they fear to surrender because of the danger that their action may be interpreted as a sign of lost strength Direct negotiation is most successful where both sides are well organized.

Voluntary arbitration can assume the burden of settlement when direct negotiation fails. By submitting the dispute to arbitration, both sides can accept without loss of prestige a decision that does not carry with it full vindication of their position publicly stated. Some authorities believe that there is a danger of breeding disputes under voluntary arbitration. Since the fear of open warfare is removed, the employers or the employees may present a demand with everything to gain and nothing to lose This difficulty can be counteracted in part by the use of a penalty Where the difference of opinion involved in the dispute is on a fundamental principle, such as recognition of the union, voluntary arbitration does not appear satisfactory. Direct negotiation is much better under such conditions For disputes of less importance, voluntary arbitration offers a very effective way out of difficulties in interpreting a trade agreement. The effectiveness of voluntary methods depends to a considerable degree upon the complete acceptance, by management, of the union with which it must negotiate Hostility breeds failure.

B. Labor Participation in Management

The Issue of Joint Control.—A well developed program for the settlement of industrial disputes will go far toward the establishment of industrial peace. But this approach seems to imply the inevitability of conflicts between labor and capital; it places emphasis upon the settlement of a dispute after it arises rather than upon prevention, by removing the underlying causes of dispute. This reasoning has led to the conclusion that a spirit of cooperation, based on a mutuality of interests between labor and capital, can be established only if labor is given a partial voice in the control of industry Demands by labor

for some form of representation in the management of industry have in recent years shown a strong tendency to supplant demands for higher wages, better working conditions, and similar common causes of friction between the two industrial classes. The extreme left wing of the labor movement demands the elimination of private enterprise as the only solution, while the public statements of many businessmen lead one to believe that this "all or nothing" philosophy is not confined to the radical segment of modern society. But the search for a compromise solution has engaged the sincere interest of many prominent labor and business leaders. We shall now turn our attention to some of the experimental moves in the direction of increased labor participation in, and coöperation with, management.

The Case For and Against Joint Control.—Those who oppose the demand of labor for a partial voice in the management of industry usually base their case on the argument that such a policy interferes with the right of a businessman to manage his business in his own way. They reason that ownership and risk-taking should carry with them the right to control and manage industry. It is the capitalist-employer who bears the financial risk of business enterprise. To give a partial voice in management to labor, without labor at the same time sharing in financial responsibility, is considered a dangerous policy. It is also charged that divided responsibility is inefficient. "Too many cooks spoil the broth." A capable individual, given complete responsibility, accomplishes efficiency in operation that is impossible with divided power.

However, the case for joint control is strong. In the first place, the assumption that workers do not bear part of the risks of industry is false. A period of slack production means unemployment to the workers, and the complete failure of an enterprise means that the worker must seek permanent employment elsewhere. Enterprises affected by seasonal variations quite generally lay off their employees during the slack period. In other words, the workers bear part of the *financial risk* of the industry. If wages had to be paid continuously, regardless of the condition of the industry, just as interest on bonds and other forms of indebtedness must be paid, then it could be truly said that workers did not share in the risk of industry. But the laying off of men for short periods of seasonal slump, or permanently when a change in the status of industrial enterprise takes place, really means that the management has shifted to the worker a heavy financial burden which the industry itself would otherwise be forced to assume. Laying off men during the seasonal slump, for example, is the practical equivalent of saying to the workers, "In order to cut expenses and reduce the financial loss to the owners of this business, we shall refrain from paying you part of our liquid assets as a wage until our economic position is improved." In addition to the financial risk, workers also assume the risk of accident, occupational diseases, and similar risks of a personal nature. Secondly, there is the possibility that joint control will materially reduce the extent of labor "soldiering" and making the work

last as long as possible—a practice previously alluded to as leading to much waste and inefficiency. Most of these practices represent labor's attempt to protect itself against forces which it cannot govern. Without a voice in management, labor is helpless and finds such problems as continuity of employment, hiring and discharging, completely outside its control. Thirdly, the power of organized labor will be more conservatively utilized if some responsibility for the management of industry is placed upon the workers' shoulders. There is nothing like responsibility for tempering one's demands. If the leaders of organized labor have a part to play in the management of industry, it is highly probable that they will be more cautious in the demands they make and more thorough in their study of the problems facing the management, since responsibility for their actions must be assumed if management recognizes their rights to a voice in control. Fourthly, many authorities believe that the talent of individual employees can be better made use of under a system of partial labor control. Through the shop organization workmen can make suggestions and exercise the ability they possess beyond the mere tending of a machine. And finally, unquestionably a better spirit of understanding will exist in industry if labor feels that it is a copartner and stands with capital at the helm of the business. For example, when a demand for higher wages is refused on the ground that the industry is in such a financial position that it would be impossible to pay the increased wage, the workers can accept the decision with much more confidence and mental satisfaction if they know that the decision was reached in the presence of, and with the consent of, their own representatives.

Union-Management Coöperation.—In Chapter VII we noted that divers policies of output limitation have characterized the policies of organized labor. Labor leaders recognize the importance of maximum output, both as a direct source of funds for wage payments and as the road to higher standards of living; but, in specific situations, opposition to new mechanization, and the practice of limiting output, appear necessary to protect the jobs of the men immediately involved. The reasons given for this difference between broad expressions of philosophy and actual practices all trace back to distrust of management control. The logical answer to this economic dilemma is some form of joint labor-management responsibility. The most interesting experiment of this type is known as union-management coöperation. In its formal dress, the idea appears to have originated in the shops of the Baltimore and Ohio Railroad. Railroad shopmen suggested, even before the strike of 1922, that they be permitted to coöperate with management in operating the shops. They finally obtained the consent of Daniel Willard, then president of the Baltimore and Ohio Railroad, and the experiment was begun in the Glenwood shops of that railroad in January, 1923. The unions retained a consulting engineer, Mr. Otto S. Beyer, to act as labor expert to coöperate with management in placing the shop on an efficient basis. The plan was

quickly extended over the entire railroad system, and was introduced into the Canadian National Railway System by the late Sir Henry Thornton. Later the Chicago and Northwestern Railroad and the Chesapeake and Ohio Railroad were added to the list. The principles of union-management cooperation have been applied in several companies outside the railroad field. The most notable case is that of the agreement between the Rocky Mountain Fuel Company, of Denver, and the United Mine Workers of America. The plan adopted by Yeomans Brothers of Chicago is also of interest because that concern operates under a closed-shop agreement.

The Principles of Union-Management Coöperation.—The theory of union-management cooperation may be stated in seven basic requirements. "These are: (1) full and cordial recognition of the standard unions as the properly accredited agents to represent railroad employees with management; (2) acceptance by management of the standard unions as helpful, necessary, and constructive in the conduct of the railroad industry; (3) development between unions and management of written agreements governing wages, working conditions, and the prompt and orderly adjustment of disputes; (4) systematic cooperation between unions and management for improved railroad service and elimination of waste; (5) stabilization of employment; (6) measuring, visualizing, and sharing fairly the gains of cooperation; (7) perfection of definite joint union-management administrative machinery to promote cooperative effort."[2]

The machinery of cooperation is a committee composed of representatives of both sides built on the already existing union organization. The representatives of labor and capital meet in joint conference to consider such broad problems as job analysis, standardization, improving the quality of the work, the proper balancing of forces and work in the shops, the securing of new business for the railroad, and the stabilizing of employment. Committees meet locally in the shops and also in large "system" meetings. This plan does not eliminate the old union organization for the settlement of grievances and collective bargaining; it merely supplements that organization. In other words, it is not a method for the settlement of industrial disputes, but is a definite step towards the partial participation of labor in management.

The Significance of Union-Management Coöperation.—The success of union-management cooperation may offer some hope for better industrial relations in the future. It represents a promise by labor to society that restriction of output and opposition to scientific management will be withdrawn, *if organized labor is protected from abuses resulting therefrom by a voice in the management of industry.* The unique experience of a union calling in an efficiency expert to eliminate waste and inefficiency from railroad car shops

[2] Otto S. Beyer, Jr., "The Technique of Cooperation," in *Bulletin of the Taylor Society*, February 1926, p. 7.

possesses a significance that it is impossible to exaggerate At the Atlantic City Convention of the American Federation of Labor in 1925 a resolution was passed, announcing the support of the union management cooperation plan by the American Federation of Labor and recommending its spread to other industries. More recently (1940), President Philip Murray of the CIO gave his support to the movement, emphasizing, however, that the principles of unionism and collective bargaining must be clearly recognized by management prior to any agreement. The Second World War placed new force behind union management cooperation, so that by April, 1942, about 500 plans had been put in operation.[3] It would appear that here is a possible solution to some of the difficulties of industrial relations, which gives the desired efficiency from the employers' viewpoint, and does not interfere with the principle of unionism held to be so important by labor. Labor can assume an obligation to increase production and efficiency In place of a controversial habit of thought is substituted a cooperative habit of thought. Opposition to the plan can be overcome in specific cases by modification of procedure Some such solution must be found if increasing membership in organized labor is to advance rather than impede dynamic progress in industrial technology

Employer Experimentation.—The constant threat of work stoppage because of industrial disputes, and the steady growth in power of organized labor, have caused many employers to experiment with new forms of employer employee relationships on their own initiative These employer ventures vary considerably in both plan of organization and objectives, but for convenience we can group them into two general categories: (1) employee representation plans and (2) earnings sharing plans The first group includes shop committees, works councils, and company unions. The second group includes various forms of employee stock ownership and profit sharing The distinctive characteristic of all these plans is that they use a single plant or enterprise as a focal point for employer employee relations in each case. Even where the employer recognizes and accepts a labor union as representing his employees in connection with these plans, he attempts to establish a union that is parallel with his own organization, and that is concerned with operations from his point of view, rather than from that of labor. It is for this reason that we consider all such ventures an employer approach; the primary interest of every employer is industrial peace within his own individual jurisdiction

The Shop Committee.—It was during, and just following, the First World War that the shop committee movement came into prominence. Its peak was reached in 1928 when the estimated total number of employee members

[3] H A Millis and R E Montgomery, *op cit* p 470

reached 1,547,766; but by 1932 the number had declined to 1,263,194.[4] The encouragement given to the movement by the National Industrial Recovery Act in 1933 revived interest in it, especially in several mass production industries, such as meat packing, farm machinery, electrical products and the metal industries; so that by 1935 the estimated number of employees included in the committees reached 2,500,000.[5] Since then the labor unions, especially the CIO, have successfully organized much of this area.

Shop committees developed independently of labor unions, for the most part. In numerous cases they owe their very existence to attempts by employers to meet the challenge of organized labor by accomplishing some of its objectives without union recognition. A shop committee differs from a labor union in that: (1) the unit is a shop or plant rather than a craft or industry; (2) employers as well as employees are usually represented; and (3) the initiative for establishing a plan usually comes from the employers rather than from the employees. When the arrangement is extended to include an entire plant, it is called a *works council,* and if the organization spreads over an industrial district, it is known as an *industrial council.*

The purpose of shop committees (other than the questionable motive of establishing a substitute for labor unions) is to reduce industrial unrest in three ways: First, it creates machinery for the prevention of industrial disputes, by giving the workers a part in the formulation of management policies that directly affect them, such as the right of discharge, promotions, working conditions, and wage payment systems Second, it establishes machinery for the peaceful settlement, through conciliation, of disputes that do arise Third, it gives the worker a feeling that he is not merely an element of cost along with raw material and machinery, but is considered an important part of the plant organization. He is treated as a partner with the hope that cooperation and good feeling will be established Such a plan has much inherent merit, but defects have hampered its development. As already stated, the plans are usually instituted by the employer and he generally arranges that the organization of employees with which he deals be restricted to workers actually on the plant's payroll.

Shop Committees and Company Unions.—Frequently shop committees have been built on the foundation of company unions. Much of the controversy over the desirability of the committees (and of the co-partnership plans to be discussed later) has centered around these unions. In their favor, employers assert that: (1) local persons settle local disputes, and no one is in a better position to understand the circumstances and problems involved in a given industrial dispute than those who are on the ground and directly affected by it; (2) a close personal acquaintanceship is estab-

[4] National Industrial Conference Board, *Collective Bargaining Through Employee Representation* (1933), p 16

[5] Twentieth Century Fund, *Labor and Government* (1935), p 79

lished between the leaders of the men and the leaders of management; therefore, regardless of the seriousness of the dispute involved, the bitterness on both sides will be reduced, permitting negotiations to be conducted on an amicable, cooperative basis. If union leaders are brought in from the outside, their attitude is usually hostile or militant, and they find it difficult to assume a conciliatory point of view. The opposition to the company union committees has come, as can be supposed, from organized labor. It has been charged that the union, being the creature of the employer, possesses little independent power. The election of representatives can be controlled by management, making a democratic organization impossible Committee men can be intimidated, for they may lose their jobs if they obstruct management plans, owing to the fact that they have no strong outside union to support them. The use of business experts brought in from the outside is prohibited, and the employees do not secure the competent advice needed to guide them in presenting their case. Should an actual conflict break out, there exists no strong union organization to support the strikers In other words, the committees created become mere tools of the management because of the smallness of the unit on which their authority rests; the unit of organization is the company itself. Not only may labor suffer, but the employer himself may be affected, for he is not protected against wage cutting on the part of an unfair competitor. No one plant can fight individually the trade practice of an industry as a whole.

The Future of Shop Committees.—The shop committee furnishes an excellent method for interpreting and administering a trade agreement. Both the employers and employees being represented on the committee, questions of interpretation and administration can easily be submitted to it and handled in a very satisfactory manner. The committees also recognize the worker's interest in the plant and give him a chance to assist in management, even if in but a small, unpretentious way. The problems of the individual plant are settled by those who know them best—the workers and employers within that plant. Every enterprise has its own local conditions and problems, understood only by those directly engaged in the plant The future of shop committees seems to lie in the direction of the adoption of the shop committee system as a supplementary organization to the labor union. Organized labor generally supports the shop committee plan when accompanied by recognition of the union on the part of the employer Modern industry needs both methods, the one taking care of the broad problems of industry as a whole, and the other taking care of the immediate problems of the individual plant.

The Nature of Profit Sharing.—Experiments with profit sharing were among the earliest attempts on the part of employers to gain the cooperation of their employees and to tie up their success with the success of the management Profit sharing may be defined as rewarding an employee with a share in the profits of a business enterprise in addition to his regular wages. The

share in the profits must be a payment in addition to the full market rate of wages paid in the locality in which the industry is situated The practice of paying the workers a wage lower than the current wage level, and requiring them to depend on a share in the profits distributed to take up the difference, is not true profit sharing. If this is done, workers will drift to other plants where the regular wage is assured The agreement must be definite, and must be stated prior to the distribution of the share; otherwise there is no incentive to increase the amount of effort put forth by the individual workman Since the primary purpose of profit sharing is to induce more efficiency and greater productivity on the part of the worker, obviously he must be notified of the plan in advance The share of the profits should be large enough to attract the worker, for the possibility of a small gain would not be sufficient to induce him to put forth the effort the employer desires Lastly, each plan must be constructed on the basis of the individual needs and purposes which brought it into being. If the employer desires to secure continuity of employment as the result of his plan, the seniority feature must become the basic principle of the scheme he adopts. On the other hand, if the primary purpose is incentive to greater effort, then the plan must be based fundamentally on the productivity of the enterprise. In practically every case, profit sharing schemes are the outgrowth of the suggestions of the employer and are operated almost completely by the management, without much regard for the suggestions and desires of the employees. It is the businessman's own attempt at the solution of industrial unrest

Types of Profit Sharing.—Of the various plans known as profit sharing, the three in most common use are direct or straight profit sharing, the payment of bonuses, and the distribution of stock. Straight profit sharing is what generally passes as profit sharing in current economic literature. Its chief feature is the payment of cash at the end of an agreed fiscal period All costs of production, interest on the invested capital, salaries of the management, and similar items are first deducted The residue is considered net profits and is distributed between employers and employees on a previously agreed basis The chief technical difficulty in this type of profit sharing is the fixing of the salary of management and the publicity of records it requires Workers are often distrustful of management and unappreciative of the importance of its function, and they are at a loss to understand why the executives should obtain such apparently exorbitant salaries. On the other hand, to convince employees that the plan is above board and that the profits are as the management states, the books of the corporation must be opened, and there is danger that information of the condition of the business will pass into the hands of competitors or banking institutions on which the industry depends for its financial needs. Of course, the mere increase or decrease in the profits paid annually to the employees in itself reveals much as to the financial success of the enterprise during the preceding year.

Bonus payments, strictly speaking, should not be considered profit sharing. They represent paternalistic gifts by the management to the employees. They are not based on a mutual participation plan, but on the grateful appreciation of management for the services rendered by their employees during a period of peace. Since they are paid usually without prior announcement, they can have little effect as an incentive except through the creation of a better basis for the future. Schemes for bonus payment generally take the form of periodic payments to the employees of a certain percentage of their wages, usually not predetermined or announced in advance. Sometimes the bonus payment becomes so regular that the workers come to look upon it as part of their pay and expect it regardless of the existence of an officially announced policy. In many concerns, notably banks, the practice exists of paying semiannually a bonus on salaries at a rate equal to the dividends declared on the stock. Thus, if the stock yielded six per cent dividends, the wage-earners would secure six per cent on their salaries. The payment of a bonus equal to the rate of dividend on stock has the merit that it makes the worker feel on a par with the capitalist, and also that the employee's share is made to fluctuate automatically with the prosperity of the concern. Bonuses frequently are paid at the Christmas period.

The issuing of stock to employees, either gratuitously or at a subscription rate below the current market value, has become one of the most common forms of profit sharing. Sometimes the distribution of stock is made in lieu of and equal to a distribution in cash; at other times the employees are given the privilege to subscribe for stock and pay for it in weekly installments over a period of years, the total payments being less than the market value of the stock at the time the distribution was made. The many schemes for stock distribution should perhaps not be classed as true profit sharing. They are often merely devices to reduce labor turnover, by making the right of participation equal to the term of service with the enterprise. New employees (that is, those with less than six months' service) customarily are not permitted to participate at all, and the longer the period of employment the greater the amount of participation, up to a definite fixed limit. When used in place of true profit sharing and bonus payment, the distribution of stock supposedly has the advantages of developing thrift on the part of the employees, reducing labor turnover, and permitting the management to share the profits with the workers, without withdrawing the profits from the working capital of the enterprise. Very few of the stock distribution plans now in operation have been carried to a point where the workers own enough of the securities to be a factor in the management of the industry.

Experience with Profit Sharing.—Schemes for profit sharing seem to have originated in France. One of the earliest attempts that that of a house painter and decorator, Leclaire, in Paris. In order to stimulate interest in the business and thereby increase its efficiency, Leclaire announced in 1842 an elaborate

profit sharing plan. With many modifications this plan has been in continuous successful operation down to the present time. Profits are divided on an agreed basis among the managers, a mutual provident society (an insurance organization), and the employees. Capital receives an agreed fixed rate of interest. Other French experiments followed. British experience with profit sharing seems to have originated under the French influence. H Briggs and Company made an attempt at profit sharing in 1865 in Whitwood coal mines, but the plan was abandoned after a decade of trial. The most successful British experiments have been the South Metropolitan Gas Company in 1889, and the Lever Brothers Company plan established in 1909 by Lord Leverhulme. The South Metropolitan Gas Company plan originally paid cash bonuses, but later introduced stock distribution instead. The plan today carries with it, also, a copartnership organization, and machinery for the settlement of industrial disputes The Leverhulme plan provides for the issuance of partnership certificates which entitle the holder to share in profits The number of certificates is limited, and the allotment is based on the recommendations of the officials, primarily the foremen. If the employee leaves the concern, the share is convertible into preferential certificates.

In the United States one of the earliest, and certainly one of the most successful, experiments with profit sharing is that of the Nelson Manufacturing Company. Under the leadership of Mr. Nelson, this company adopted a profit sharing plan in 1884 which has continued in operation with rather marked success ever since. The plan originally provided for the announcement at the beginning of the year that net profits would be shared, after a commercial rate of interest on capital had been paid, by equal division among capital and wages and salaries of employees with six months' employment or more behind them. The employees were to select an auditor to verify the computations The employee had the privilege of leaving his share on deposit with the company. Later the plan was changed to provide for stock distribution. Following the panic of 1893, dividends were suspended for several years but later were resumed. Before any employee receives his stock certificate, he must have been with the company three years. If he leaves before his three-year service is completed, he loses his accumulated dividend Employees are forbidden to sell their stock certificates, but if they really need funds the company stands ready to repurchase them.

Other American experiments fairly well known are those made by the Proctor and Gamble Soap Manufacturing Company, William Filene's Sons Company (a Boston department store), and the Dennison Manufacturing Company

An Appraisal of Profit Sharing.—The supporters of profit sharing base their confidence on the belief that it will stimulate workers' efforts and increase their efficiency by making their income depend on the profits earned by the enterprise in which they are employed Every workman becomes an

unofficial inspector, since high production, reduced waste, and similar matters mean dollars and cents to him when the profits are distributed. It is claimed that a harmony of interests between employer and employee is created; both gain and lose together. The worker, therefore, has an interest in avoiding strikes and other types of friction in his relations with his employer. Where the seniority feature is tied up with profit sharing, labor turnover may be materially reduced, because the worker loses his share of profits if he fails to stay the year out. Also, since participation often depends on the number of years of service, there is strong inducement for the individual workman to cling to his job as long as possible A final, less commendable motive behind profit sharing is the combating of union power. Many enterprisers believe that a system of profit sharing will force the individual worker to look to his employer for the improvement of his condition, rather than to his union, thus weakening the hold of the union over its members.

The amount of profits earned by an enterprise depends largely on factors outside the workers' control, and for which the workers are in no way responsible. Changes in the demand for the product, mismanagement on the part of the officials, price level and business cycle movements, and similar economic factors have an important effect on the profits of industry, and yet are completely outside the workers' control It is difficult to make the worker give the best he has in him when he observes that the profits shared seem to fluctuate in a manner but little connected with the effort he puts forth. This brings out the most serious single defect in the theory of profit sharing, the failure to connect individual effort with individual reward. Not only is the worker's individual effort nullified, but the slacker is rewarded equally with the conscientious man. Unless workers can see direct connection between individual effort and individual reward, it is difficult to get the results profit sharing seeks to attain. It is primarily for this reason that present-day business executives are turning towards incentive wage systems and away from profit sharing in their effort to increase the efficiency of labor. A second defect is the limitation placed on the mobility of labor, since the employee suffers a loss if he seeks employment elsewhere. This limitation means that the bargaining power of the worker for wages is considerably reduced. He is induced to refuse jobs offered elsewhere paying a little higher wages and not to insist on higher wages where he is employed, but to put his faith in larger profits instead. The lack of business knowledge and the suspicion of the "white collar" man, the accountant, salesman, advertising man, etc., on the part of laborers, hamper the successful operation of profit sharing unless the profits are exceptionally large. Lastly, the difficulty of sharing loss, when bad times face the concern, has resulted in the breakdown of many profit sharing plans Some of the most effective plans provide for loss bearing by placing in a separate fund a percentage of profits, out of which losses can be met during dull times.

Both profit sharing and the less elaborate forms of employee stock purchasing have failed to stand the test of time. Experience with various schemes, covering almost a century and spread over most of western Europe and the United States, has resulted almost universally in failure. Many plans function successfully for a short period under sincere and able leadership, but later break down. A few outstanding successes have been made, but, broadly speaking, profit sharing has not proved a permanent institution looking towards the betterment of industrial relations. Contention rather than co operation often develops. The workman is skeptical of the salaries paid to management, of the dividends on stock, and he is constantly looking for the "joker"—some ulterior motive which he thinks the management must have in mind. Employee stock purchase plans have had the same unsuccessful history. Very few of the numerous plans enthusiastically established in the twenties were able to survive the depression years, and the losses of workers' savings through stock price declines had unfavorable results on plant morale

The idea of profit sharing apparently will work more successfully where the plant in which it is installed is small. Where the number of employees is large it is very likely to break down. Much depends on the personality and sincerity of the leadership under which it is instituted. Businessmen such as Mr. Nelson and Lord Leverhulme would probably operate successfully almost any plan installed. Their success is to be attributed more to their own ability than to the inherent merits of profit sharing systems. Profit sharing does not act as a substitute for the wage system; for this reason it has never gained the support of organized labor. Since new plans are constantly being tried out by sincere and able businessmen, the movement should be well understood by the student But in modern industry, with its mass production, highly integrated business organization, and powerful labor unions on an industry-wide basis, industrial peace cannot be realized on a broad scale by the individual firm approach.

Summary

Labor and business leaders, being aware of the heavy economic loss that attends industrial conflict, have developed machinery for the settlement of disputes and for giving labor some voice in management. Voluntary settlement of disputes prevents strikes in the vast majority of cases. These methods include direct negotiation (conciliation), mediation, and voluntary arbitration Direct negotiation is the coming together of disputants on their own initiative, for the purpose of reaching a settlement by discussion and give and take. The results of this collective bargaining are usually incorporated in a written trade agreement. Once the agreement is signed, disputes are restricted to interpretations of the agreement until it expires Minor questions of interpretation are usually settled by negotiation through a shop union representative and the appropriate management official. The shop union representative

is elected by the employees from among their own number. All the representatives so elected within a plant constitute a shop committee. Sometimes a business agent of the union guides negotiations. Major questions of interpretation are usually settled by a board of conciliation provided for in the trade agreement. If this board fails to agree, the case can voluntarily be submitted to arbitration. Arbitration machinery is authorized in many trade agreements. Provision is made either for an impartial chairman or for submission of the dispute to some designated government agency. When disputants are unable to get together for negotiation, a mediator may tender his good offices to help smooth the pathway of settlement. Mediation has the advantage of bringing the parties together without loss of prestige by either side. All voluntary methods of settlement have the advantages of settlement without coercion; thus they assist in the establishment of good feeling in the industry.

To establish industrial peace requires not only a plan for the settlement of industrial disputes, but also some satisfaction of labor's demand for a partial voice in the management of industry. Opponents of the latter principle agree that the capitalist-employer takes the risk and should have full responsibility for control. Those favoring some joint control argue that labor also takes risks (even financial) in industry, and that plant efficiency is increased by gaining the cooperation of the workers. An interesting form of joint responsibility is union-management cooperation, which is built on recognition of the union and is primarily directed toward reducing the policies of output limitation practiced by many labor unions. Employers have experimented with sharing the management function partly with their employees, usually independently of, if not directly in opposition to, organized labor. These employer plans are of two general types (1) employee representation plans; and (2) earnings sharing plans. The first group include shop committees, works councils, and company unions. The second group includes various forms of employee stock ownership and profit sharing. Organized labor has looked with disfavor on all forms of profit sharing, because they focus the interest of the worker on a single plant rather than on the industry or on organized labor as a collective movement. Most experiments along these lines have failed. The few successes can be attributed to the unusual ability and sincerity of the enterprisers behind them. There appears to be little hope for progress in this direction for the future, but new plans are continually being tried.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

A C Pigou, in Part III of his *The Economics of Welfare* (1932), gives a distinctly superior theoretical analysis of the problem of industrial peace The whole subject of profit sharing is well covered in C Canby Balderston's *Profit Sharing For Wage Earners* (1937) See also G James *et al.*, *Profit Sharing and Stock Ownership* (1926), and a report of a subcommittee on finance of the United

States Senate, entitled *Survey of Experiences in Profit Sharing and Possibilities of Incentive Taxation* (1939), published by the Government Printing Office. All of the following books (of which pertinent chapters are indicated) were directly useful in writing this chapter: Richard A. Lester's *Economics of Labor* (1941), Chapters XXIII, XXIV, and all of Part Four; *Organized Labor* (1945) by H. A. Millis and R. E. Montgomery, Chapters XIII to XV inclusive; S. Howard Patterson's *Social Aspects of Industry* (third edition, 1943), Chapters XVII and XIX; Florence Peterson's *American Labor Unions* (1945), Chapters XII and XIV. Other textbooks that have influenced this chapter are Solomon Blum's *Labor Economics* (1925); Carrol A. Daugherty's, *Labor Problems in American Society* (1938); and Edward S. Furniss's, *Labor Problems* (1925). The publications of the United States Department of Labor and of the National Industrial Conference Board contain numerous studies rich in data of actual experience. Of the conference board's publications see especially *Collective Bargaining Through Employee Representation* (1933), and *Profit Sharing* (1935).

CHAPTER IX

The State's Part in Labor Problems

A. Control of the Conditions of Employment

The Reasons for Government Intervention.—Experience with *laissez-faire* early taught the lesson that the worker was unable to protect himself from mistreatment and exploitation under the new industrialism that developed out of the Industrial Revolution. Unscrupulous employers were left free to tyrannize their employees, and the hazards of industry were multiplied as the development of the machine process progressed. As a consequence, the state found it necessary to intervene for the protection of the worker in industry. It did so with legislation, often known as *labor legislation,* to control the conditions of employment. This includes control over minimum wages, hours of employment, health, safety, and protection from insecurity. The magnitude of this last problem (social security) demands separate treatment, so it will be the subject of Chapter XI. We shall here restrict our attention to those general aspects of employment conditions that fall outside the field of social security.

Legislation controlling conditions of employment not only protects the worker, but also protects employers with high social standards from the unfair competition and low standards of their less public-spirited competitors. A textile manufacturer may honestly desire to maintain working conditions in his plant at a very high level, but the imperative demands of competition may force him to abandon his ideal in practice. The morality of the enterpriser with the lowest standards tends to become the standard of the group. Labor legislation controlling conditions of employment has the effect of equalizing somewhat the competition between business enterprisers.

The Police Power.—By judicial interpretation, our government has been given authority (not specified in the Constitution) to protect the health, morals, safety, and general welfare of its citizens, under what is known as the *police power.* It is primarily vested in and used by the state governments, but the courts have decided that similar power is possessed by the federal government in respect to those activities over which the Constitution gives it specific control. To some extent the police power comes in conflict with those clauses of the federal Constitution that guarantee individual liberty and private property, for the exercise of the power inevitably affects the personal and property rights of certain citizens. For instance, the condemnation of a

factory building, on the ground that it is unsafe and a public menace, is equivalent to confiscation because the owner of the building suffers a serious financial loss On the other hand, the power is society's means of protecting its members against the abusive exercise by individuals of their constitutional rights. It prevents the latter from using their property rights, in such cases as the one just cited, so as to endanger the lives of others. Just how far the state and federal governments may limit or alter the individual rights of liberty and property depends on the willingness of the courts to extend the scope of the police power. Fortunately, the courts have been willing to expand the scope as, in their opinion, changing conditions seem to warrant The general rule followed seems to be that the use of the power will be declared constitutional whenever the acts of the legislative bodies in question are considered reasonable and necessary

The police power is of major importance because it furnishes the legal authority for much of the economic and social legislation that has been enacted. Examples of the use of the power by state governments are such laws as those relating to compulsory education, continuation schools, public health and sanitation, factory inspection, the use of safety appliances, building inspection, and the control of intrastate common carriers. Typical of the federal government's use of the power are federal laws compelling the use of railroad safety devices, maintaining the purity of foods and drugs, suppressing the white-slave traffic, inspecting meats, regulating the manufacture of phosphorous matches, and the fixing of warehouse and grain standards. Government protection of women and children in industry, and laws establishing minimum wages, fixing hours, and regulating other conditions of employment have relied heavily on the police power for justification before the courts The power placed in the hands of the Supreme Court of the United States as final arbiter of the extent of the police power is almost unlimited It follows that the rate of progress in advancing government protection to workers depends upon the will of that court. While many critics believe the jurists should adopt a more progressive policy than has been followed in the past, there is much to be said for the exercise of caution before new extensions of the police power are made. Its unrestricted use would have the effect of completely nullifying the protective sections of the Constitution

The Problem of Jurisdiction.—The United States is a federation of forty-eight sovereign states, operating under a written constitution. There is, consequently, a division of powers between the individual states and the federal government. The federal government possesses only those powers expressly granted or implied in the Constitution. All residual powers remain in the hands of the state governments. This division of authority gives rise to awkward problems of jurisdiction, as well as to unfortunate diversity in the standards of the several states. With the police power vested primarily

in the states, it was inevitable that standards of labor legislation would vary widely from state to state. Decisions of state supreme courts have added to the confusion by failing to agree on the constitutionality of certain types of labor legislation Some states have clauses specifically restricting the scope of labor legislation written into their constitutions.

It has been difficult for the federal government to act as a unifying force here. However, among the specific powers granted to it by the Constitution, it has the power to tax and to regulate interstate commerce. It also has the implied power to spend money in the interest of the general welfare. By formal use of these powers it has been possible to win court approval of the present array of labor laws on the federal statute books Powerful obstacles have had to be overcome, but one can now hope that a consistent and uniform national labor policy is in process of formulation.

Sweatshop Control.—In many industries, where division of labor has been carried to great lengths and only simple machinery is required, the sweatshop system has come into existence. The irregularity of the demand for products of a seasonal nature has also contributed toward its growth The system is one in which the employees—usually of an ignorant type—are both overworked and underpaid. In the large industrial centers very old persons, women, and children (especially from immigrant families) are employed at simple tasks for long hours, under unsanitary conditions and at extremely low rates of pay. The work is either taken home in small bundles to be finished, or it is given out in larger quantities to contractors who operate small shops in tenement or dwelling houses. Frequently all the members of a family engage in the work, using as a workshop the rooms in which they live and sleep

The work of sweatshops is difficult to regulate, because it takes place in the homes of the workers. In the United States a system of licensing these shops has been tried. Contractors are required to obtain licenses for their premises, and the issuance of the license depends on the fulfillment of certain sanitary and healthful regulations. Constant inspection by government agents is necessary under this system Contractors permitting work to be done in unlicensed premises are themselves held responsible. The weakness of the licensing system is that only conditions of employment are regulated The broader questions of low wages and long hours remain untouched. The National Recovery Act in 1933 brought a decline in sweatshop work, in that 97 of the codes approved under it contained provisions regulating the practice[1] With the demise of the National Recovery Administration, an increase in sweatshop work was noted, because control was thrown back to the states One effective method of attack is the inclusion of preventive rules in trade agreements. The Amalgamated Clothing Workers and the International

[1] H A Millis and R E Montgomery, *Labor's Progress and Some Basic Labor Problems* (1938), p 400

Ladies' Garment Workers have succeeded to some extent in eradicating the sweatshop system in the clothing trades by this means, but effective solution of the problem of exploitation awaits improved state legislation under the police power. The federal government can do little for the present.

Minimum Wage Laws.—One of the outgrowths of attempts to ameliorate the evils of the sweating system has been minimum wage legislation. The purpose of a minimum wage law is not to control or determine wages in general,[2] but to prohibit the employment of anyone at a wage below an amount necessary to maintain a minimum standard of living. These laws either state definitely the wage considered to be a minimum, or they leave the determination of that wage to an administrative commission. The latter plan is by far the best because changing economic conditions, such as variations in the price level, make it necessary to vary the wage rate frequently if the intent of the law, to just cover minimum living costs, is to be carried out.

Economists are not in agreement as to the merits and advisability of minimum wage laws. The case for such laws may be summarized in four general arguments. In the first place, the laws prevent unscrupulous employers from exploiting ignorant persons who possess very little bargaining power. Secondly, the competition of the lower strata of workers with the upper grades is eliminated, thus tending to prevent the depressing of wages. In the third place, the productivity of industry is increased, by forcing employers to use the most efficient production methods and the most modern equipment, in order to enable employees to earn the living wage. At the same time, the worker is stimulated to increase his efficiency in order to hold his job. Finally, employers with high standards are protected against underselling by competitors with low standards. Critics of the minimum wage assert that it is impossible for a group of men to control the wages of labor by law. Wages depend on the supply and demand of labor, and can never be greater than the productivity of the individual workers concerned. It is also asserted that the burden placed on society will be heavy, for persons unable to earn the living wage will not be employed at all, and will, consequently, become charges of the state. The earning of a small wage is considered preferable to idleness and living on charity.

There is nothing basically wrong with minimum wage laws, provided they are wisely framed and applied. It is perfectly feasible to fix a minimum wage and forbid employment below that figure. Some industries that cannot profitably pay the wage fixed may be forced out of business, perhaps, but if they cannot pay a living wage they had better be dispensed with—they are industrial parasites. Industries that can pay a living wage should, if necessary, be forced to do so. The difficulties to be encountered are rather

[2] In this connection compare the argument of Chapter XVIII, Section C.

those of practical operation The complexity of the wage system in modern industry makes the problem of administration serious. However, if the wage limit is fixed at the very lowest minimum, the risk is slight

Experience with Minimum Wage Legislation.—The first real experiment with minimum wage legislation was that of the state of Victoria in Australia, in 1892. In 1909 the British adopted similar legislation, which now covers several million wage-earners. During and following the First World War, the idea spread to many other countries. In some instances the laws covered only homework (e g Switzerland, Austria, Czechoslovakia, Argentina) while in other cases the coverage was very general (e.g. Hungary, Portugal, Soviet Russia, Italy, South Africa).[3] Canada has experimented extensively. The provincial laws vary widely · Alberta's minimum wage regulation is restricted to female labor, while Ontario's includes a large number of men. In 1935 a Dominion Minimum Wage Act was passed, authorizing machinery for establishing minimum wage rates in specified trades.

In the United States, prior to the National Recovery Act, minimum wage laws were restricted almost entirely to women and children. The first state law was passed in Massachusetts in 1912. This act, however, did not confer mandatory powers but depended largely on public opinion for its enforcement. Other states followed suit during the next decade, and in 1918 Congress enacted a law for the District of Columbia. Court decisions on these laws were conflicting and their constitutionality was clouded in doubt. In 1923 the Supreme Court decided that the District of Columbia act was unconstitutional, declaring it to be an unreasonable interference with the individual's right of freedom of contract. This untimely decision placed all state laws in jeopardy. In 1936 the Supreme Court added to this uncertainty by sustaining the New York courts in declaring that state's law invalid. However, the Court swept all preceding cases aside in 1937 and clearly held that states could, as a legitimate exercise of the police power, fix minimum wages for women and children.[4]

Federal experience with wage control began with the National Recovery Act. For the two-year period in which this act was in force, wage control was a part of the codes approved by the National Recovery Administration. This reached over twenty-two million workers.[5] The basic idea was that the upholding of wage rates would help recovery by maintaining, and perhaps increasing, the nation's purchasing power. The minimum wage varied from code to code because each code was the result of negotiation and agreement, subject to government approval The highest minimum rate for unskilled

[3] Material on foreign experience is drawn largely from the excellent concise summary given in pp 295 301 of Millis and Montgomery, *op cit*

[4] *West Coast Hotel Co v Parrish* 300 U S 379

[5] Millis and Montgomery, *op cit*, p 356

male workers rarely exceeded 40 cents an hour, and in half the codes it fell between 30 and 40 cents.[6]

The Fair Labor Standards Act of 1938.—In 1938 Congress passed the Fair Labor Standards Act, popularly known as the Wage and Hour Law, which firmly established minimum wage control as a federal policy. This law set a "ceiling" on hours (to be described below) and a "floor" on wages for industries engaged in interstate commerce. Agricultural workers and a few other groups are exempt from these restrictions, but the coverage of the act is broad. It established minimum wages at 25 cents an hour for the first year and 30 cents thereafter until the seventh year, by which time a floor of 40 cents was to be in effect Considerable flexibility was provided by the establishment of a Wage-Hour Administrator in the Department of Labor It is his function to examine wages and hours in all industries in interstate commerce, and to determine where and when minimum wages should be flexed upward and maximum hours downward. To assist in this work, the establishment of some 750 boards, representing industry, labor and consumers, was authorized. Factors to be considered by the boards in making their recommendations include local economic conditions, comparative transportation costs, and the size of the units in the industry. To collect pay awarded by the boards, employees can sue employers in federal courts, and violations of the law subject an employer to heavy penalties. Employers can, however, apply for a review of their case in the federal courts.

The Fair Labor Standards Act shows clear evidence of the experience obtained under the National Recovery Act. The organization of the boards resembles that of the code authorities, and the 40 cent minimum shows the influence of rates fixed under the codes. The administrator is not permitted to discriminate between different regions of the nation, but within that limitation he has considerable freedom of action. Pressure to raise the 40 cent limit has been strong, but at present writing (1947) all such attempts have failed While the law is ostensibly designed merely to fix the limits below which wages (and beyond which hours) cannot go, it can well become an entering wedge for extensive federal regulation of wage rates.

Wartime Wage Control.—Some insight into the future possibilities of wage control is furnished by the activities of the National War Labor Board during the Second World War. This board was created by Presidential Executive Order on January 12, 1942, and was affirmed by the Stabilization Act of October 2, 1942, which provided that the President should stabilize wages and prices at levels prevailing on September 15 of that year. In its operations the board had powers covering: (1) approval or disallowance of all wage increases below $5,000 a year;[7] and (2) prevention of work stop

[6] *Ibid*, p 364

[7] Jurisdiction over wage increases above $5,000 was assigned to the Bureau of Internal Revenue

pages by industrial disputes. The measures provided for the second of these objectives will be considered in parts B and C of this chapter.

On the basis of the authority granted to it, and on that of experience with earlier cases, the board developed four general principles on which wartime wage increases would be approved [8] (1) to correct maladjustments between the cost of living and workers' straight-time earnings; (2) to correct gross inequalities in wage rates; (3) to correct substandard living conditions; and (4) to aid, where necessary, in prosecution of the war. The first principle led to the famous "Little Steel Formula," which allowed general increases in wages to the extent of 15 per cent above January, 1941 average straight-time hourly earnings This increase supposedly matched increases in the costs of living up to the time of the Stabilization Act, at which point the administration was committed to curb inflation. As successive wage increases were authorized, this principle rapidly declined in significance, the battle for wage increases then turning to the other three principles. The test of gross inequality was established by comparisons between occupational groups and labor market areas, thus introducing discrimination not permitted under the Fair Labor Standards Act. The test of substandards of living settled at 50 cents an hour, thus raising the minimum of the Fair Labor Standards Act when the War Labor Board approved Wage adjustments necessary to prosecution of the war were approved only after one of the war production central agencies certified their necessity.

This direct control of the level of wage rates will unquestionably have profound consequences for the American economy. Precedents have been established, a huge body of administrative law has been formulated, and a revolution has taken place in habits of thinking. A major depression now might well fix wage control as a permanent federal policy. Continuation of wage control at anything like the wartime level would move us far along the way to a planned economy under federal administration.

Reduction in Hours of Employment.—The greater productivity of the present economic system has made possible a reduction in the working hours of labor. Just what constitutes a working day or week of suitable length is difficult to state. In defense of the shorter working day, it is argued that it gives the worker more leisure time, prevents fatigue and health impairment, and under some conditions increases the volume of production. Some leisure is necessary to the living of a normal, healthy life Cultural advantages can be obtained. The prevention of fatigue reduces the danger of industrial accidents and protects the health of the worker. Production is stimulated by the increase in efficiency that goes with reasonable working hours under healthful conditions. On the other side, it is argued that reduction of hours

[8] See the excellent article of H Henig and S H Unterberger entitled "Wage Control in Wartime and Transition," in *American Economic Review* June, 1945 pp 318 336

is not always needed, because the strain of work differs widely in different occupations. For some strenuous types of work, a six-hour day is long enough, while in other relatively pleasant and light kinds of work, ten hours may not be excessive. The danger of abusing free time is also present. Many workers do not know how to use leisure beneficially. In some industries it is said that technological conditions are such that a decrease in production must result if the hours of employment are decreased. The root of the controversy lies in the fact that improved industrial technology enables a given amount of production to be accomplished with less labor than formerly. The question is What is the best way to make use of this saving? Should we use it to produce more, without reducing hours, or to give more leisure to the workers?

Legislation to limit hours of employment was the general rule abroad years before American legislation succeeded in gaining court approval. As in the case of minimum wage laws, the constitutional guarantee of individual liberty and freedom of contract has been a stumbling block in the United States. However, the courts were willing to grant the constitutionality of hours limitation in specific cases, such as dangerous occupations, and where public welfare was directly involved, as in the case of railroad employment. The courts also authorized the restriction of hours of government employees when authorized by the municipal, state, and federal governments. The National Recovery Act initiated federal control over a wide area by provisions included in the codes. As noted above, federal government intervention was firmly established by the Fair Labor Standards Act in 1938. This law established the forty-hour week as standard over the major portion of American industry Hours beyond forty are permitted, but must be paid for at time-and-a-half rates.

Child Labor.—Children can perform many of the tasks of industry almost as efficiently as adults. In fact, some persons believe that the child's delicacy of touch, nimbleness of fingers, and lack of outside mental distraction, make him the most suitable labor for certain occupations The danger of sacrificing children to the god Mammon appeared in the early stages of the Industrial Revolution, and its presence has continued ever since as one of our most acute problems of social adjustment. The desire for cheap labor, combined with the docility of children, has proved too much of a temptation to the unscrupulous type of profit-seeking business enterpriser. Grasping parents have contributed to the problem by their unnatural willingness to sacrifice their own child's future for a few dollars of immediate income.' Arduous factory labor, with its long hours of continual application to routine tasks, is disastrous in its effect on growing children, especially during the period of adolescence Educational opportunities are lost, the natural instinct to play is curbed, physical development is retarded, and frequently standards of morality are corrupted through the constant association of the child worker

with adult employees of very low mental caliber. The moral fiber of the growing generation is also weakened by the relaxing of home discipline, for the earning of an income instills in the child a feeling of independence. Labor leaders have complained that the presence of children in industry has had the effect of depressing the general wage level. Children will work for low wages because they cannot often get more, and parents will permit them to work for such wages because what little they do make nevertheless adds something to the total family income. Adults, who are usually supporting families, must thus meet very unfair competition from the child workers.

Those who favor child labor, at least in some degree, assert that the assumption that all children are capable of and should receive education until they reach the age of sixteen years is wholly unwarranted. In many cases, the best social policy is to place the child in industry as soon as it can be done without sacrifice of health. This is especially true in the case of backward children. The struggling of a backward child to comply with compulsory education requirements beyond its ability should be avoided; instead he should be put into a healthy, useful, industrial occupation. The critics also claim that the families from whom the children come in many cases urgently need extra revenue, and the prohibition of child labor would so restrict the income of such families that the child himself would suffer. Finally, it is often frankly asserted that healthy work has never hurt anyone and children should not be permitted to grow up in idleness. While there is, of course, some force to these arguments, they really constitute arguments for carefully drawn and administered legislation, rather than for no legislation at all.

The Present Status of Child Labor Legislation.—Every state in the Union has passed child labor legislation in one form or other, but the laws in some cases are very inadequate. Several states permit children to work ten hours a day. In most cases the limit is fixed at eight hours. The minimum age at which employment is permitted is usually fourteen years, with a somewhat higher limit for dangerous trades. Most states prohibit night work, and some provide for continuation school for a short period after the child is permitted to enter industrial employment. Prior to 1933, Congress made two attempts at the regulation of child labor for the United States as a whole, but the Supreme Court declared both laws unconstitutional. In 1924 Congress submitted to the states a child labor amendment to the federal Constitution, but it has so far failed to obtain ratification by the necessary number of states.

In 1933, President Franklin D. Roosevelt opened a new approach for federal regulation by requiring all industrial codes adopted under the authority of the National Industrial Recovery Act to contain a declaration that the use of child labor constitutes unfair competition. The National Recovery Act was declared unconstitutional, but interest in child-labor legislation was

aroused, with the result that the Wage and Hour Bill of 1938 contains a section relative to child labor. Children under sixteen are barred from employment in industries engaging in interstate commerce, with some exceptions allowed where school attendance is not interfered with, and where the Labor Department approves. All children under eighteen are barred from hazardous occupations. This time Supreme Court approval was obtained.[9]

The Protection of Women in Industry.—The provision of special legal protection for women in industry has raised bitter controversy because equality of the two sexes is a cherished goal of many women's organizations. Experience has shown, however, that women are frequently forced to accept unsatisfactory conditions of employment, and that protective legislation is the only solution. State laws regulating hours and conditions of employment for women at first met the same judicial obstacles that have already been reviewed in the discussion of wage control. Today all but a few states have special legislation of some sort for the protection of women in industry. The rapid progress of trade unionism among women is reducing the extent of exploitation, and of course the provisions of the Wage and Hour Law apply to women employees.

B. State Intervention in the Right of Labor to Organize and Bargain Collectively

The Right to Organize.—In Chapter VII we observed that the legality of trade unions is well established and that the strike, boycott, and picketing are legal within certain limits. In recent years government influence has gone far beyond this issue of mere legality; the state now takes positive action in protecting the right of labor to organize and bargain collectively. The first federal action of this positive type was embodied in the labor provisions of the Erdman Act in 1898. This act was passed primarily to provide machinery for the settlement of railway labor disputes, but it also provided that no railroad could require a prospective employee to agree not to join a labor organization, nor could a railroad discharge or otherwise discriminate against an employee because he belonged to a union. These clauses protecting a worker's right to join a union were invalidated by a Supreme Court decision in 1908, and it was not until the First World War that similar protective federal action reappeared. President Wilson appointed a War Labor Board in 1918. The decisions of that board usually contained clauses affirming the workers' right to organize, free from employers' interference.

Section 7(a) of the National Recovery Act of 1933 was the next step in building this new federal policy. It provided: (1) that employees should have the right to organize and bargain collectively through representatives of their

[9] *United States v. Darby*, 61 S.S. 451, (1941).

own choosing; (2) that no employee should be required to join a company union, or prevented from joining a labor organization of his own choosing, as a condition of employment; (3) that employers should comply with the code as to maximum hours of work, minimum rates of pay, and other conditions of employment. Employees and employers were to be given opportunity to determine by mutual agreement these hours, wages, and conditions. If they failed to reach an agreement, the President could prescribe such conditions. The life of the National Recovery Act was short, but the stimulus given to labor unions was great. Union organizers could claim government approval and could argue the advantages of organized labor in a far more favorable light. The ground was prepared for the organization of mass production industries by the CIO.

The National Labor Relations Act.—The National Recovery Act was declared unconstitutional in May 1935, but two months later the National Labor Relations Act (popularly known as the Wagner Act) was passed, not only restoring the labor provisions of the National Recovery Act, but moving far beyond it in protecting the rights of organized labor. The new law established a National Labor Relations Board of three members, with two primary duties: (1) to determine and certify which labor organization should be legally recognized as the unit to bargain collectively for the employees in a given case; and (2) to prevent employers from engaging in certain labor practices designated in the act as "unfair." Section 8 defines such unfair labor practices as including: (1) any restraint or coercion of employees in the exercise of their collective bargaining rights; (2) any attempt to dominate or interfere with the administration or formation of any labor organization; and (3) any discrimination in regard to hiring or tenure of employment, or any condition of employment that encourages or discourages membership in a labor organization.

It should be observed that the National Labor Relations Board was not intended to be a mediating or arbitrating body, nor was it given jurisdiction over wages, hours, or general conditions of employment. It was created only to protect the right of labor to organize and bargain collectively, and to supervise open and fair elections to determine which union was most representative of the employees, and therefore entitled to act for them in collective bargaining. Thus the act was definitely on labor's side; it was designed to equalize the bargaining power of employees with that of the employer. The board moved vigorously toward these objectives in its decisions. This active government support on the side of labor, and the concomitant restriction of employers' rights, led to amendment of the act in 1947.

The National Labor Relations Act gave labor a very potent weapon for the spread of unionism. If a union could get into the position where it could gain the favorable vote of a majority of the employees, it could demand an election, and if it won, the employer would be compelled to recognize it

as the sole bargaining unit with which he must deal. Union organizers could use this as a persuasive argument to enlist employee support for the union, but the employer could not meet such an attack squarely without running the risk of a charge that he was using unfair labor practices.

The procedure of election to determine the bargaining unit is important because of the bitter jurisdictional fights sometimes waged between rival unions. The board is not meant to take sides in these fights, but merely to see to it that they are settled by democratic vote of the employees. Nevertheless it was placed in a position where it could hardly avoid influencing the result, because it has to decide whether to hold a single election for an entire plant or separate elections for each shop. If only one election is held for a whole plant, the balance may be tipped in favor of a single industrial union to represent all the employees. If separate elections are held in different shops, craft unions are more likely to win, and several unions will then gain bargaining rights. The board is thus placed in a difficult position, and it is not surprising that it has frequently incurred the animosity of one or the other federations.

The policies established by this law and its administration make it easy to understand the rapid growth in union membership since 1935. Government was openly on the side of labor, aiding in the formation of new unions and protecting unions already established. It is not so clear that the legislation improved industrial relations or reduced the number of strikes. By striking, or threatening to strike, an election could be forced in an unorganized plant. The board was plagued with jurisdictional disputes and the "raiding" of one union by a rival. Many of the difficulties resulted from the rapid growth in membership. Neophytes who were untutored in labor history and techniques became union officers. It takes time to develop competent leadership.

Foremen's Unions.—The manner in which the National Labor Relations Act can advance labor's cause is well illustrated by a relatively new development in the union movement, the unionization of foremen and supervising employees. Foremen have always been considered the lowest rank in the hierarchy of management. They are management's point of direct contact with the employees. Unions claim, however, that in modern mass-production industries the foreman is no longer a management man who hires, fires, plans, and directs operations for his men. Today he is merely a supervisory worker, carrying out the orders and plans of management on the factory floor. He is just a worker with a specialized job. Unions also charge that management undermines labor's power by rewarding able labor leaders with appointments as foremen, thus bringing them over to management's side This is a very difficult issue to decide, for there is clearly much truth in the argument of both sides. With but few exceptions, management has fought bitterly against the organization of foremen. In a test case in 1946,

which involved the miners' union and the Jones and Laughlin Steel Corporation, the National Labor Relations Board decided in favor of recognizing the foremen's union.

Labor Board approval of foremen's unions gave considerable impetus to the movement, but this was checked by a provision in the Labor Act of 1947 to the effect that no employer should be required to deal with a foremen's union. This law did not prohibit such unions; it merely relieved the employer of the requirement that he deal with them. One large union of foremen at once disbanded, but others are at present writing (1947) carrying their case to the Supreme Court.

Legislative Restraint of Union Activity.—Growing opposition to labor organization on the part of industrial leaders, and the rising tide of strikes after the Second World War, gave rise to vigorous attempts to curb union power This attack was aimed in three directions (1) An attempt was made to curb union policies designed to limit output or to require the employment of unnecessary union workers. (2) Aggressive action was taken against so-called labor racketeering. (3) A drive for the amendment of the National Labor Relations Act was begun to give employers rights as well as duties, and to give unions duties as well as rights.

The passage of the Lea Act in 1946 illustrates the first of these attacks. It was directed against the "featherbedding" practices by which the American Federation of Musicians was forcing employers to hire more of its members. This law, known as the Anti Petrillo Act (after Petrillo, the aggressive president of the musicians' union), declared illegal any action by the union to compel radio firms to (1) employ unnecessary men; (2) pay for musicians' services not actually rendered; or (3) refrain from broadcasting educational programs or programs originating abroad All of these practices had been widely used by the union as a means of increasing the demand for musicians' services. The constitutionality of the Lea Act was upheld by the Supreme Court in 1947 Some specific applications of the law may subsequently be declared unconstitutional, but the broad principle embodied in the legislation has been validated It would seem that this important decision forecasts court approval of certain sections of the Labor Act of 1947, which is discussed below Further legislation against "featherbedding" is likely to be forthcoming in the future

The Hobbs Anti-racketeering Law of 1946 illustrates the second type of action enumerated above It provides for the punishment of union members and others who interfere by robbery or extortion with the movements of goods in interstate commerce While broad in its scope, the law was aimed at the alleged practices of the teamsters' union in forcing trucking firms, by violence and threats, to hire local union drivers to deliver their products in the larger cities, especially New York Farmers complained that in delivering produce in New York, they were forced to pay fees, equivalent to a

day's pay for a union driver, for the privilege of entering the city. The union leaders denied responsibility, claiming that gangsters were responsible. The act was bitterly opposed by all organized labor. The unions were afraid that its definition of robbery as the obtaining of property from another by actual or threatened force, violence, or fear of injury, would be used to break down the right of labor to strike, picket, and boycott. Furthermore, since the law provides that *any* federal district attorney can start proceedings, the unions point out that it leaves the door wide open for unfair prosecutions in localities that are antagonistic to organized labor. President Truman, on signing the bill, declared that it in no way limited the recognized rights of labor when peacefully and lawfully exercised. The Hobbs law will probably be approved by the courts. If enforced with wisdom and discretion, it may assist organized labor to free itself from undesirable elements that have attained control over certain parts of its membership. However, the wording of the act is broad; hence union fears, that a widespread attack upon labor's hard-won rights will result, has some real justification.

The Labor-Management Relations Act of 1947.—The third point of attack against the abuses of union power listed above led to the enactment in 1947 of a sweeping law. When the Republican party gained control of Congress in the elections of 1946, a flood of bills was introduced aimed at the curbing of union power. The party leaders succeeded in combining the acceptable proposals of individual bills into one omnibus bill, which became law over a presidential veto. This was the Labor-Management Relations Act of 1947 (referred to in this text as the Labor Law of 1947, and popularly known as the Taft-Hartley Law). It is applicable to all industries that are subject to federal interstate commerce regulation, with the specified exception of railroads, airlines, agriculture, governmental bodies, Federal Reserve banks, and nonprofit organizations.

The law contains so wide a range of provisions that we have already been required to refer to it several times in our study of labor problems. However, its major objectives fall into two broad categories: (1) attempts to curb the abuses of labor unions in both their industrial and political activities; and (2) the establishment of new regulations and machinery for government intervention in the control and settlement of labor disputes. The second of these will be reserved for discussion in Part C of this chapter. It is with the first group of provisions that we are now concerned.

Under the law, an enlarged Labor Board is charged with the duty of preventing unfair labor practices on the part of unions as well as employers, and conversely, protecting the rights of employers as well as employees Unions are forbidden to use certain specified labor practices which are designated as unfair. They must not use coercion to recruit new members, and picketing to force a worker to join a union is prohibited. Pressure on employers or employees to support a jurisdictional dispute or a secondary boy-

cott is likewise prohibited. Union dues and initiation fees must not be excessive or discriminatory. Employees as well as the employer must bargain collectively in good faith. Strikes must not be called during the waiting periods prescribed in the new mediation provisions To earn the protection of the Labor Board, unions must distribute financial reports and must disclose annually the salaries and expenses paid to all union officials.

Employers remain subject to the major requirements of the National Labor Relations Act of 1935, but they gain several new rights. They are free to discuss union affairs prior to a Labor Board election. They may present their own views to their employees, either orally or in writing, as long as their statements are free from coercion or threats of reprisal. The Labor Board can protect an employer against demands by a union that he hire union members for a particular type of work, and he cannot be compelled to hire exclusively through a union hiring hall. He is no longer compelled to bargain with a union of foremen. And he may sue a union for damages if its members breach a trade agreement. However, he is also liable for suit for similar breaches on his part. Thus trade agreements established by collective bargaining are given the status of contracts enforceable at law.

Restraints on the political activities of unions are of two types: First, no employer is compelled to bargain collectively with a union if any of its officers are communists. Such unions lose the protection of the Labor Board. Second, unions are prohibited from making contributions or expenditures in connection with political campaigns, either in elections or primaries.

It is difficult to predict the effects of so detailed a law. Congress itself recognized the problems ahead by embodying in the act a provision for creating a Joint House and Senate Standing Committee to study its operation and to recommend such amendments as experience may seem to require. What now appears to be minor may turn out to be of major importance. For illustration, the law creates an administrative officer, to be known as General Counsel of the Labor Board, who must decide whether charges preferred by a union against an employer, or vice versa, are to be heard by the board, and whether orders of the board are to be referred to the courts for enforcement. It would appear that this individual could control all board action—a situation that may invite controversy between the board and its own general counsel. The broad permission given to employers, employees, and the board to sue for damages may cause a log-jam in the courts. The rights of individual workers, unions and employers to appeal to the board may place an impossible administrative burden upon it. Certainly a huge administrative organization will be required. The constitutionality of various provisions of the law will undoubtedly be challenged. Some provisions of the law may be nullified by union pressure to force employers to waive the rights accorded them. Immediately after passage of the law, the United Mine Workers won a new contract in which the employers signed such

waivers. Other unions are demanding the same protection, as existing contracts expire.

Labor leaders have denounced the law bitterly as a piece of hostile legislation directed against the hard-won rights of the workers and their unions, but it must be recognized that it grew out of union abuses that needed correction. If some of its provisions are too harsh or unworkable, the leaders should be willing to coöperate in preparing more equitable and practicable legislation. In the past all legislation aimed at correcting the abuses of organized labor have been fought by union leaders without counterproposals for eliminating evils that are acknowledged to exist. This uncompromising position is, in the opinion of the present authors, a serious mistake. No group or vested interest can be permitted unrestrained power if democracy is to survive. The growth in strength and power of organized labor must be tempered with an acceptance of its great responsibility to protect the public interest. Violence is violence, whether engaged in by a "labor gangster," or by an employer's "scab" or "fink" (strike-breaker). When a trade agreement is signed, both parties must be required to abide by its provisions during the life of the contract. Monopoly power in the hands of labor is just as dangerous as it is in the hands of business enterprisers. The speed with which labor has grown in stature has admittedly made difficult the disciplining of the numerous neophytes. But the public, through its legal government, has a right to require that labor will use its newly found power with a clear understanding that it has obligations as well as rights.

C. State Intervention in Industrial Disputes

State Aid in Voluntary Settlement.—When an industrial dispute threatens, the state may intervene by offering its good offices as an aid to voluntary settlement, or it may use its coercive powers to compel the disputants to accept some prescribed procedure of negotiation and decision. In Great Britain, the Conciliation Act of 1896 provided for governmental registration of conciliation boards. The Board of Trade was authorized either to establish conciliation boards or to utilize existing voluntary machinery for the settlement of disputes. The act was intended to supplement and strengthen the voluntary efforts of industry itself. It is generally agreed that the system operated with marked success.

In the United States, the reluctance of government to interfere in industry retarded developments along English lines, but today most states have passed laws, either creating state commissions for voluntary arbitration or empowering some state official to act as a mediator. In 1913 the act creating the United States Department of Labor included provisions authorizing the Secretary of Labor to serve as mediator and to appoint "commissioners of conciliation" (i.e., mediators) in labor disputes, if, in his judgment, such action were de-

sirable For several years little use was made of this authority, but gradually a steady expansion of the service developed In 1944 the "conciliation" service acted in 21,900 industrial disputes, and in recent years it has been successful in avoiding over 90 per cent of the threatened strikes in which it intervened[10] The service became an active and influential agency, respected by both labor and management. Its functions were eventually expanded to include arbitration The Labor Act of 1947 transferred the service to a new, independent agency, outside the Department of Labor, and gave it the new name, Federal Mediation Service The old personnel was retained, and the powers of the new agency were the same as those of the former conciliation service.

Compulsory Investigation.—We have explained that compulsory investigation involves the legal prohibition of a strike or lockout until the question under dispute has been submitted to a governmental agency for the purpose of careful investigation and subsequent publication of the facts. The chief essentials of a plan for compulsory investigation are First, the legal right of a governing board to collect all possible information, summon witnesses, and in any other way possible, obtain all the facts of the case; second, the prohibition of the calling of a strike or lockout during the period of consideration of the case by the governmental agency; third, the formulation of recommendations as to the settlement of the dispute; fourth, the giving of widespread publicity to the recommendations; and fifth, the restoration of the legal right to strike or lockout, after the publishing of the findings of the investigating body

The enforcement of a period of compulsory peace to permit investigation has the merit of giving time for the hot passions of the moment to cool down, and of permitting a settlement to be effected later in a more calm atmosphere The excitement that comes to a head in an industrial dispute prevents each side from using reason and common sense, which would be brought into play if a period of time were permitted to elapse before settlement What seems vital one day may seem trivial a few weeks later This system also recognizes openly the public interest in strikes and lockouts, and permits a crystallization of public opinion on the dispute in question through the publicity given the facts The order calling for a strike or lockout will be given much more cautiously after publicity has taken place The chief disadvantage of compulsory investigation is that the wage earners must give up the most effective part of their right to strike—that is, the suddenness with which the strike is called If employers are given time to organize their industry, employ strike breakers, stabilize their finances, etc, they may defeat a strike that would have been successful had it been called unexpectedly A second difficulty is the impossibility of enforcing the prohibition of a strike against strong opposition by wage earners It is possible to arrest the leaders, and this often is sufficient to cripple the power of the strikers, but it is obvi-

[10] Harold W Metz *Labor Policy of the Federal Government* (1945), p 233

ously impossible to reach effectively the rank and file of strikers in any dispute involving a large number of workers.

Compulsory Investigation in Canada and Great Britain. –In 1907, Canada set up a nation-wide system of compulsory investigation under the administration of its Minister of Labor. In 1925 an adverse court decision led to a new law restricting the plan to interprovincial commerce. The plan is compulsory in the case of mines and public utilities, but can be extended to other industries if both contending parties agree. Under the plan, either party desiring a change in wages or working conditions must give thirty days' notice, during which period either may demand the formation of a Board of Conciliation and Investigation; or the Minister of Labor may set up such a board on his own initiative. The two parties each appoint a representative on the board, and these two, or the Minister of Labor, select a third, who acts as chairman. The board then proceeds to investigate the issues; meanwhile, no strike or lockout is permitted. If possible, the dispute is settled by conciliation, but if this fails, the board then gives publicity to its findings and recommendations.

There has been vigorous criticism of this system. Labor charges that the Minister of Labor has abused his power, that its requests for appointments of boards have been denied, and that the postponement of strikes has weakened its position. Many illegal strikes have occurred, but the penalty features of the law have not been carried out. On the other side, the system is said to have reduced industrial strife and to have brought about amicable settlement of many disputes. On the whole, compulsory investigation has met with popular approval in Canada.

In 1919 Great Britain set up a system of voluntary arbitration by creating an industrial court to which both parties of a labor dispute could submit their differences by mutual consent. This was coupled with a provision permitting the Minister of Labor to appoint a court of inquiry in case of industrial disputes, although the court did not have authority to compel testimony The right to strike was not limited, and the report of the court of inquiry did not make recommendations, but merely stated what were the questions and facts at issue. This machinery has been utilized considerably since it was created. Cases handled by the industrial court, on the other hand, steadily declined until, just prior to the Second World War, they were confined mostly to government departments and government industries.

Compulsory Investigation by State Law.—Several states have passed legislation establishing varying degrees of compulsory investigation. In Michigan notice of intention to strike or lockout must be given to the Board of Mediation five days prior to the action, and the disputants are required to attempt a voluntary solution. In industries affected with a public interest the waiting period is thirty days, and in these industries the governor has authority to establish special commissions to hold hearings and report. In Minnesota a

written notice is required of the union or employer seeking a change in a labor agreement. Parties must then negotiate, and a ten day waiting period prior to a strike or lockout is required.[11]

The Colorado Industrial Commissions Act of 1915 was a more ambitious project, frankly modelled on the Canadian Disputes Act. It required a thirty days' notice of change in the terms of employment, and no strike or lockout was permitted until the investigation of a commission had been made and publicity given the findings. Acceptance of the award was not compulsory. The act was originally broad in coverage, but since 1923 it has been restricted to industries affected with a public interest. There is a difference of opinion as to the success of this legislation—unlawful strikes occur.

Federal Railroad Legislation.—Considerable use has been made of the principle of compulsory investigation in federal legislation designed to eliminate strikes in railroad operations. The Transportation Act of 1920 provided for conciliation by local adjustment boards, with compulsory investigation by a national board if the locals failed to obtain an agreement; but the plan did not work well because of lack of cooperation from the parties in controversy. Therefore it was succeeded in 1926 by the Watson-Parker bill, setting up a new plan. This was a combination of conciliation, mediation, and (as a final step) investigation (but without compulsion). Again the results were unsatisfactory. Unsettled disputes increased, so that both employers and employees voiced demands for stronger arbitration provisions.

The Railway Labor Act of 1934 (which is still in effect) sought to remedy the defects of the two earlier plans by differentiating between major disputes that must be settled at the time of writing a new trade agreement, and minor disputes having to do with the interpretation of existing agreements. Major disputes were to be handled through the usual collective bargaining procedure; but for disputes over interpretation of existing agreements, final authority was given to a new National Railroad Adjustment Board, consisting of 18 members chosen by national unions and 18 members designated by the railroads. This board was divided into four parts according to classes of employees, each division operating as a unit in its own sphere of responsibility. If such a division board is unable to reach a settlement by majority vote, the act provides that a neutral referee must be appointed by the Board of Adjustment, or, if they cannot agree, by the National Mediation Board. Awards or settlements were made enforceable by appeal to the federal courts. Thus an element of compulsory arbitration was established.

The Act of 1934 contained a number of supporting provisions of very real importance. Employers were specifically restrained from antiunion activity, collective bargaining agreements were to be encouraged, and the right of the worker to organize was recognized. However, the closed shop and

[11] H. A. Millis and R. E. Montgomery, *Organized Labor* (1945), pp. 791-792.

checkoff were forbidden. Paradoxically, these last two prohibitions were in accord with union desires, for they were in harmony with long established policies of the strong railroad brotherhoods. By writing them into the law, the railroads were prevented from building strong company unions in opposition to the national unions.

The new law worked well until a threatened strike in 1946 was prevented only by the intervention of President Truman. Since only two railroad brotherhoods were aggressively active in this strike threat, it may be that the effect in the long run will be to strengthen, rather than destroy, the machinery for peaceful settlement of railroad industrial disputes.

Compulsory Investigation Under the Labor Act of 1947.—In the Labor Act of 1947 there were provisions dealing with the settlement of labor disputes. These provisions were based largely on American experience with compulsory investigation in transportation. Industrial disputes are classified by the law into two groups: (1) national disputes that imperil public health and safety; and (2) all other disputes. If the President decides that a given dispute threatens national health and safety, he is authorized to appoint a fact-finding board to investigate the case and publish a report, which must include statements from both sides and must set forth the employer's "final offer." Simultaneously the Attorney General may ask for an 80-day court injunction against an incipient strike or lockout. A vote of the employees concerned must then be taken on the acceptability of the employer's final offer. If the offer is rejected, the injunction is lifted and the strike or lockout is then permitted. However, if the President considers it necessary, he may request Congress to enact special legislation directed toward preventing a work stoppage that might take place at the end of the 80-day waiting period. This last provision opens the door for some form of compulsory arbitration if Congress is so inclined.

For all other disputes (that is, those not threatening national health and safety) strikes and lockouts are legal unless the dispute concerns the amendment or termination of an existing trade agreement or contract. In the latter cases, the disputants must negotiate for at least 60 days before calling a strike or lockout. However, in this area of nonnational disputes, there is nothing to prevent a strike by a union to force an employer to sign a new contract.

Compulsory Arbitration.—The chief essential of a plan for compulsory arbitration is the making of a strike or lockout a punishable offense. Both parties to the dispute are bound by the decision of a governmental agency or board, which derives its power from an act of legislature. Sometimes provision is made for a money fine, in case of failure to live up to the terms of the law. The theory underlying compulsory arbitration is that industrial disputes must be brought under the jurisdiction of the judiciary, just the same as civil disputes. It is claimed that the public welfare should supersede the

interests of the disputants. A strike of coal miners, for instance, may mean famine of coal for both home and industrial uses. The householder may suffer illness because of the inadequate heating of his home, and the wheels of industry stop turning because of curtailment in the supply of fuel.

The difficulties of compulsory arbitration, however, have been generally believed so serious that this way of settling industrial disputes has made little headway in the United States or England. It has been widely used in Australasia. The chief difficulty is that it deprives the workers of the right to strike, by making the act of striking a criminal offense. Workers believe that their present economic position is the result of the constant activity of the trade unions in their behalf, and the threat to strike is the backbone of the unions' power. Labor leaders are emphatic in their statements that organized labor would be unable to continue its campaign for the betterment of the wage-earners' economic position without the power to cripple employers by striking, and thereby showing the strength possessed by the workers when acting as a unit. A second difficulty is the impossibility of enforcing the decision of a compulsory arbitration board when that decision is contrary to the demands of a large group of wage-earners. If a strike occurred involving several thousand persons engaged in some large railroad system, it is difficult to see just how effective action could be taken against these individuals to uphold the power of the arbitration board. It has been suggested that labor unions be required to deposit with the government a sum of money which can be confiscated as a penalty in case of an illegal strike, but such a sanction can have but little influence on the rank and file of wage-earners under circumstances of intense industrial excitement and unrest. Loss of seniority rights, loss of social security rights, and withdrawal of the legal protections against injunctions have been suggested as methods for coercing individual workers to comply, but such drastic action might be more serious in its social effects than the strike itself. Labor leaders have also asserted that it is impossible, under modern conditions, to obtain arbitration boards that will not be prejudiced to a considerable extent in favor of the employer. In all the legal traditions which have become embodied in our common law, there is inherent a tacit acceptance of the sacredness of private property. This is bound, it is claimed, to prejudice any decision where there is a conflict between personal rights and property rights. Labor unionists also fear that compulsory arbitration will tend to weaken organized labor, since one of the essential reasons for its existence will be removed with the elimination of strikes as a form of industrial warfare. Compulsory arbitration in Europe and the United States cannot take place on a very wide scale until confidence in the justice of the decisions rendered by our legal machinery has been increased to such a point that neither party to a dispute would have any suspicion whatever of prejudice entering into a decision handed down by an arbitration board.

The New Zealand Plan.—Compulsory arbitration has been given its most severe test in Australasia. The New Zealand plan, which is the best known, was introduced by an act passed as early as 1894. Under this plan, commissioners of "conciliation" were appointed by the governor of the island When an industrial dispute arose, one of these commissioners immediately proceeded to the locality wherein the dispute had occurred and he sought there on the ground to effect a settlement by acting as mediator. If the commissioner could not succeed in bringing about a settlement, he was required by law to organize a "council of conciliation." Each side of the dispute, the employer and the employees, appointed representatives, called assessors, to serve with the commissioner of conciliation on these councils. After reviewing the case, the council rendered a decision. If the award was not acceptable to one side, an appeal could be made to the court of arbitration. The court of arbitration had for its chairman a supreme court judge and two other members, appointed by the governor and selected from a list of nominees made by the associated unions and associated employers' organizations of the country. This court was the highest authority to which an appeal could be taken in industrial disputes. The award it made was final and binding for the period stated therein. The board possessed power of compulsory investigation—that is, the summoning of witnesses and, if necessary, the examining of the books of the companies parties to the dispute. Once a decision was handed down, it applied not only to the particular disputants who had brought up the case, but also to the whole industry in which the dispute arose. The payment of a money fine was the penalty for non acceptance of the award of the court of arbitration. Disputes could be brought before the arbitration machinery on the request of registered unions or registered employers' associations. Any fifteen or more employees could form an "industrial union" and register such union with the government. Any three or more employers, or an incorporated company, could likewise form and register an association. These unions or associations made their first appeal to the commissioners of conciliation. The right of labor to form unions was frankly recognized.

The system of compulsory arbitration was apparently accepted with favor both by employers and laborers until the world-wide depression of 1929-1933 Little opposition had developed and the general sentiment seems to be that the plan was a success. Strikes were not completely eliminated, but most of those called were initiated by unregistered unions. A very small proportion of the disputes dealt with by the commissioners and conciliation councils were later carried to the Arbitration Court. However, on April 8, 1932, New Zealand passed an act amending previous legislation in such a manner as to eliminate practically all the compulsory features of arbitration. The government believed that the system had become an obstacle in the way of national recovery because of the rigid fixing of wages, hours, and other industrial con-

ditions. In 1936 a new labor government restored the compulsory features of the original plan as part of a new labor legislation program.

The apparent success of the New Zealand experiment resulted in the spreading of compulsory arbitration over the rest of Australasia in a somewhat revised form. In 1904 an Australian federal system of compulsory arbitration was instituted in order to cover disputes extending beyond the boundaries of any one state. A commonwealth Court of Conciliation and Arbitration was created, made up of the president, a justice of the high court of Australia, and two colleagues. The court was given the authority to compel conferences between disputants in order to effect settlements by conciliation if possible. Should settlement by this means prove impossible, the dispute must be arbitrated, with a resulting decision that is binding under the law. While there have been some illegal strikes, this federal court has operated with fair success for those disputes falling within its jurisdiction.

The Kansas Industrial Court.—An interesting experiment with compulsory arbitration was made by the state of Kansas in 1921. Following a nationwide coal strike, the state legislature was convened in a special session by the governor, and a law was passed establishing a court of industrial relations for the state. The usual practice of establishing a board on which three parties—employer, employees, and the public—were represented was not followed. A strictly judicial body was created. The Court of Industrial Relations consisted of three judges, appointed by the governor, and it was to have jurisdiction over industries affected with a public interest. The phrase *public interest* was given a rather broad interpretation, so that it included not only the usual public utilities, but also industrial enterprises engaged in the production of fuel, food products, and clothing. Strikes, lockouts, and other instruments of industrial warfare were prohibited. The court was authorized to call witnesses, take evidence, and make an award. Failure to accept the award made the disputants liable to fine and imprisonment. In case of an industrial dispute, the court was empowered to intervene on its own initiative, or on the application of any interested person, the attorney general, or any ten citizen taxpayers.

The power of the Kansas industrial court was crippled by unfavorable decisions in the United States Supreme Court. In June 1923 that part of the act applying to the meat-packing industry was declared unconstitutional, on the ground that the industry was not sufficiently clothed with public interest to warrant infringement of the rights of citizens to security of property guaranteed by the Fourteenth Amendment to the Constitution. A later decision, in 1925, went a step further, by declaring unconstitutional the compulsory arbitration provisions of the law in so far as they applied to working time. In view of this decision, it is doubtful whether any form of compulsory arbitration will be considered constitutional by the Supreme Court at the present time unless the industry involved is one in which the public interest is clearly

involved. The court has gone on record as believing that to compel owners and employees to continue business on terms that are not of their own making is a violation of the liberty of contract guaranteed by the Constitution. In the Kansas state elections of 1922, the status of the industrial court was made a political issue, and as a result, it was abolished, with some of its powers transferred to the state public utilities commission.

The National War Labor Board.—On March 19, 1941, President Franklin D. Roosevelt created by executive order the National Defense Mediation Board, to halt wartime strikes. Its jurisdiction was restricted to disputes certified to the board by the Secretary of Labor. The board had some powers of compulsory investigation, and it could make public its findings and recommendations, but stronger methods proved to be needed. Therefore a new board was created—The National War Labor Board, already discussed in Part A of this chapter. The statute conferring congressional approval gave this board authority to settle finally any dispute that might interfere with the war effort. To back up this authority, the President was authorized to seize (if necessary) any war plant where production was interrupted by a labor dispute. In at least twelve cases this seizure power was used.[12] The President could also place pressure on the union by sequestering funds, withholding dues, and cancelling union preference clauses, but these powers were used only once.[13]

No-strike pledges of prominent labor leaders helped strengthen the new board's position. This use of compulsory settlement of disputes in wartime was successful. Strikes did occur, but the number was remarkably low, considering the difficulties of war dislocations. However, rising wages, falling unemployment, and the patriotism that is generated in war days were all important elements helping to keep down disputes by making the workers more contented. The end of hostilities brought an end to the period of cooperation between employers and employees. As a result, the record of the board in the postwar period was not up to the wartime level. All the difficulties of compulsory methods given above were then experienced.

The Future.—Times and conditions change so rapidly that any definite suggestions for the solution of industrial disputes in the future are apt to bring forth intense and justifiable criticism. Our analysis in this chapter, however, has brought out certain lessons that will permit us to formulate a tentative program. The only possible use of compulsory arbitration, for the time being, appears to be in those industries peculiarly affected with a public interest, especially the so called public utilities. There is a real case for the prohibition of stoppage of work in these industries, and the probability of obtaining public support for such a policy is greater than in other industries. Elsewhere, employers, employees, and the majority of those who speak for the

[12] H. W. Metz, *op. cit.*, p. 265.
[13] *Ibid.*, pp. 265-266.

general public, emphatically oppose compulsory methods. Our policy, then, should be somewhat as follows

(1) The use of voluntary methods, primarily direct negotiation and mediation, should be encouraged. Disputes settled by voluntary procedure tend to establish real industrial peace. Experience has demonstrated that much can be accomplished by an extension of voluntary methods.

(2) A gradual extension of compulsory investigation, without prohibition of strikes and lockouts, holds out bright prospects. Neither side can complain that their rights are abused if they are given complete freedom to act, either by strike or lockout, when and as they see fit. The general public has the right to know at least the facts of the case in every industrial dispute. No one can justifiably object to such publicity.

(3) Industrial unrest is at the root of much of the bitterness with which industrial warfare is waged. It is a duty, both of the individual citizen and of the government, to study causes of industrial unrest and seek wherever possible to correct the conditions giving rise to this unrest.

(4) The organization of industry should be re-examined with a view to finding the proper place of the worker in modern industry, in the hope that there may be established a greater mutuality of interests between the employer and employee than has hitherto existed.

(5) Organized labor must recognize that it has responsibilities commensurate with its growth in strength. Industrial disputes today reach over such a wide area of interdependent economic interests that they may involve not merely a strike against an employer, but coercion of the public. Neither labor nor management can be permitted power to dictate and control our economy, if democracy is to survive. Organized labor should develop its own constructive program for the correction of abuses of union power. If this is not done, strong legislation will be necessary to protect the public from the danger of economic chaos.

SUMMARY

The protection of the general welfare—health, safety, and morals—is accomplished chiefly under the authority of the police power. Under this power, state legislation has been enacted to protect labor against abuses arising out of industrial conditions. Such labor legislation has been enacted to control sweatshop conditions, establish minimum wage rates, reduce hours of employment, and protect the welfare of women and children in industry. The national government has been hampered by constitutional restrictions. Nevertheless some federal control of employment conditions has developed. Begun under the National Recovery Act in 1933, it was extended by the Fair Labor Standards Act of 1938, which established federal control over wages and hours for industries that could be brought within the interstate commerce clause of the Constitution. The National War Labor Board, established in

1942, controlled wages and hours on a wide scale. It will probably have a profound effect upon postwar policy in federal control of conditions of employment.

The state now takes positive action to protect the rights of workers to organize and bargain collectively. The National Recovery Act of 1933 provided for recognition of this right in its codes; and after it was declared unconstitutional, the National Labor Relations Act guaranteed the right of collective bargaining. To support this, it created a National Labor Relations Board, with powers (1) to determine by election and certify the bargaining unit representing the employees, and (2) to prevent employers from engaging in designated "unfair labor practices." The numerical strength and power of organized labor increased rapidly under this government protection, and pressure developed for legal restraints on the use and abuse of that power. This resulted in the Lea Act (1946), prohibiting certain union practices aimed at coercing employers into hiring more workers; and the Hobbs Act (1946), directed against racketeering practices, robbery, extortion, and violence. The Labor-Management Relations Act of 1947 amended the previous National Labor Relations Act by charging the Labor Board with the duty of preventing unfair labor practices by unions as well as by employers, and increasing the rights of employers to present their side of disputes to their employees.

Most states have legislation providing machinery for the encouragement of direct negotiation, mediation, and voluntary arbitration. The federal Department of Labor's conciliation and arbitration service has been very active in this respect. The United States has been reluctant to use coercion in times of peace, but compulsory investigation has been employed for years in Canada, and several of our states have laws of this general type. The federal government has long used compulsory investigation for the settlement of railroad disputes. The Railroad Labor Act (as amended in 1934) contained a compulsory feature for settlement of disputes over the interpretation of existing trade agreements. The Labor Act of 1947 provided: (1) compulsory investigation in strikes or lockouts that threaten national health and safety; (2) a waiting period in strikes or lockouts concerning the amendment or termination of existing contracts.

Peacetime use of compulsory arbitration has been largely confined to Australasia, especially New Zealand. In the United States, the Kansas Court of Industrial Relations introduced compulsory arbitration into that state for industries affected by a public interest, but this was later abolished after court attack. In the Second World War the United States established the National War Labor Board, with jurisdiction over all disputes that might interfere with the war effort. The President could enforce the decisions of the board by plant seizure, or by action against union members.

The best future policy for the settlement of industrial disputes is development and extension of voluntary methods; correction of the underlying in-

dustrial unrest; a fair trial of compulsory investigation, without limitation on the right to strike; and the development of a sense of responsibility on the part of organized labor commensurate with its growth in strength and power. Strong legislation may, however, become necessary to protect the public interest.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

A clear and comprehensive survey of government control of the conditions of employment is contained in H. A. Millis and R. E. Montgomery, *Labor's Progress and Some Basic Labor Problems* (1938), Chapters VI to IX inclusive. Other aspects of government intervention in labor problems are covered by the same authors in *Organized Labor* (1945), Chapters XI, XIII, and XIV. H. W. Metz's *Labor Policy of the Federal Government* (1945) is very useful, both for its complete coverage of the subject indicated by its title, and for its effective organization of the material presented. A superior short survey is that of R. A. Lester in his *Economics of Labor* (1941), Chapter XXV. See also Florence Peterson, *American Labor Unions* (1945), Chapter XIV; and H. D. Koontz, *Government Control of Business* (1941), Chapters XXVI and XXVIII. Harry Henig and S. H. Unterberger, in an article entitled "Wage Control in Wartime and Transition," published in *The American Economic Review* for June, 1945, give a thoughtful and well-written analysis of that subject. For a very detailed analysis of the operation of the National Labor Relations Board see D. O. Bowman, *Public Control of Labor Relations* (1942).

Each of the following general texts contains extensive material on state action pertaining to labor problems. They have been of direct aid in preparing this chapter: Solomon Blum, *Labor Economics* (1925); E. E. Cummins and F. T. DeVyver, *The Labor Problem in the United States* (1947); C. R. Daugherty, *Labor Problems in American Industry* (1938); S. H. Patterson, *Social Aspects of Industry* (1943); Dale Yoder, *Labor Economics and Labor Problems* (1933).

CHAPTER X

The Problem of Unemployment[1]

A. The Theory of Employment

The Existence of Unemployment.—One of the criteria of economic welfare that was developed in the first chapter of this book was the test of full employment. A society that cannot keep its resources employed is not only inefficient, it is in danger of revolution, for if the masses of the workers do not have the means of livelihood which remunerative jobs provide, they are reduced to such desperation that they may be in a mood to revolt. Even if there is only a moderate amount of unemployment, it may constitute a serious economic waste, it may cause much distress among the unemployed, and it may give rise to various costly social problems, including the provision of charitable relief for those who are without means of support, and the care of those who are made sick in body, mind, or morale by idleness and its attendant poverty.

Judged by the criterion of full employment, our economic system is not functioning well. There is always a considerable amount of unemployment, which in some years has reached alarming proportions. It is difficult to cite figures for the United States which can be relied upon, but some estimates have been made which give a rough indication. According to these estimates, it appears that we always have at least one million idle workers, and during business depressions the number rises to many times that figure. In the years from 1930 to 1938 the number of unemployed was variously estimated at from eleven to fifteen millions, out of a working population of about fifty millions.

The Neoclassical Theory of Employment.—What is the cause of this unemployment? It is not the fault of the workers. There are, of course, some people who are unable or unwilling to work, but these are not what we mean by the unemployed. Unemployment, strictly construed, refers to enforced idleness on the part of the workers because industry fails to provide them with jobs. It fails to provide jobs because of certain flaws in the working of the spontaneous economic process.

According to the neoclassical theory of employment, full employment of all the factors of production *tends* to be brought about by the automatic

[1] This chapter is largely based on Chapter VII of Raymond T. Bye's *Social Economy and the Price System* (to be published soon).

is laid off in these cases, the money which was previously flowing to them in wages is not destroyed, it is merely shifted into other channels where it must give employment to just as many workers as before. In order to visualize this reasoning more clearly, it will be well to apply it to a particular case and subject it in critical examination. Such an examination will disclose that, while the theory is generally valid, it should not be stated without some qualifications. A good case for this purpose is that of technological unemployment, where workers are thrown out of their jobs by the introduction of labor-saving machinery or new processes. The reasoning on this case can be readily adapted to other instances of frictional unemployment.

Technological Unemployment.—The logic of Say's law, in its original (barter) form, establishes a presumption in favor of the view that, if labor is no longer needed in the place where it was formerly employed, it can now be used to produce some other goods for which there is a desire, and these goods can command a market because they add to the aggregate demand precisely as much as they add to the aggregate supply. Put in terms of a money economy, whatever is spent in employing such labor must reappear in the circuit flow as monetary demand for goods, so that the displaced labor, when reabsorbed into employment, will necessarily repay the sums invested in its wages. The re-employment of labor temporarily thrown out of employment should therefore be economically possible; there is money available with which to pay their wages because it is released by the stoppage in wage payments that occurs when the labor first becomes unemployed.

Consider the case of labor-saving machinery introduced into an industry where it effects a net displacement of one hundred men who were formerly receiving weekly wages of forty dollars each. By net displacement is meant the excess of laborers thrown out of work in the industry where the machine is used over the number employed in making and maintaining the machine itself. There must be such a net displacement, otherwise the machine would not be truly labor-saving. In this case, then, there will be a net reduction in wages of four thousand dollars per week in the industry concerned, and the cost of manufacturing a week's output of its product (which may be called good A) will have been reduced by that amount. In a competitive price system, the price of the good will be reduced sooner or later to the new level of costs, and consumers will save four thousand dollars weekly in their purchases of this commodity. They will presumably use the money so released, either to buy more of the good A, or to purchase more of other goods, B; or possibly they may invest a part of it, which in normal circumstances means that it will be used to purchase equipment, C. However the money may be divided among these three possibilities, it will go to create a four thousand dollar increase in demand for goods (A, B, or C), and hence for labor with which to produce them. In this way the one hundred laborers

who were thrown out of work by the machine are reabsorbed into employment.

However, the owner of the new machine in the above example may have obtained a patent that gives him an exclusive monopoly for a number of years. In that case the price of good A may not be reduced by the full amount of $4,000 for a long time, the monopolist meanwhile appropriating for himself some of the saving effected by the invention. Although he will presumably spend his share of the gains for other goods (B and C), and so help to create a new demand for labor, as in the former case, the net result is bound to work out somewhat to the disadvantage of the workers, for a monopoly profit has been introduced which was not there before. This profit will be at the expense of wages. In other words, the displaced labor will be reabsorbed in producing new goods demanded by the consumers of A and by the monopolist, but money wages generally will be somewhat lower than they were.[2]

Even where there is full competition, it cannot be taken for granted that labor displaced by technological improvements will be rehired at the same wages as before. It depends on how the change affects the proportions of labor and capital demanded in industry, relative to the supply of them. A mechanical device or a new process may enable a given kind of work to be done with less labor than before, or with less capital, or both. Seldom, if ever, will it displace both in exactly the same proportions. So, it will make either one or the other relatively more abundant. Likewise, the money released from costs by the new invention will most likely be spent for new goods whose production will require a combination of labor and capital different from the amounts of the two factors that have been displaced. There will result a change in the relations between the demand and supply for the factors of production, and a consequent change in the pattern of income distribution. The change may be beneficial to labor, in which case relative wages will rise, or it may be disadvantageous, in which case relative wages must fall.

Even in the case where labor is put at a relative disadvantage by these readjustments, it does not follow that *real* wages will necessarily be lower than before. The general effect of technological progress is to increase the real income of society. It may well be, therefore, that labor will be better off with a slightly smaller proportion of this larger national dividend than it would have been otherwise. It is certain that labor has benefited sufficiently from the technological improvements of the last century and a half to enjoy a marked rise in its standard of living.

There are circumstances in which the general introduction of mechanical improvements simultaneously in a number of important industries might be

[2] For a more detailed analysis of this case, see the citation mentioned in footnote 1, above.

disastrous for labor. If the new machinery were more labor-saving than capital-saving, reabsorbtion of the displaced workers could be accomplished only by changes of a rather fundamental kind. There would have to be either a shift in demand from machine-made to hand-made goods, or methods of manufacturing would have to be changed from those which require a large proportion of mechanical equipment to those which make more use of labor. In some cases the advantages of the new mechanical processes might be so great that it would not pay to make the latter change without a drastic drop in wages. Even if it would pay, the process of transition might take a rather long time in a complicated industrial system, where there is much fixed, specialized equipment that will not wear out for a considerable number of years. Under these circumstances, in a period of rapid and fairly general technical advance, the pace of displacement might easily exceed the pace of reabsorbtion, and technological unemployement might become a serious problem, persisting over a period of decades. Certainly, there is nothing in the theory to preclude such an outcome.

Fortunately, the facts seem to indicate that our economic system has hitherto shown sufficient flexibility to reabsorb the workers as fast as they are displaced. Despite the phenomenal progress of science and invention in the later nineteenth and early twentieth centuries, the average percentage of unemployement, both in England and the United States, seems to have been fairly constant, and the number of unemployed workers (except in periods of cyclical depression that must be explained on other grounds) has been moderate enough to be entirely consistent with the view that it is caused by frictions of a short-run character.

Cyclical Unemployment.—Economic activity in the world of capitalism is not sustained at an even pace, but is characterized by rhythmical upward and downward alternations of prosperity and depression. These fluctuations are known as business cycles. In the depression phase of the cycle, there is always a large amount of unemployment, for at such times businessmen, being unable to sell their goods at profitable prices, are forced to reduce their output, or even to close their plants. As a result, workmen are employed only on part time or are laid off altogether. Since the condition is not confined to one industry or place, but is general throughout the economy, there is no possibility of the displaced workers being reabsorbed into employment elsewhere. Both they and their employers are helpless to remedy the situation. It is a time of great hardship for the unemployed wage-earners. More often than not, their reserves of savings are small and are soon exhausted. They are then reduced to the extremity of depending on private charity or public relief. These are times when bread lines and soup kitchens may be found, where the distressed workers line up for doles of bread and soup passed out by charitable organizations. The numbers of the unemployed in the United States during periods of business depression may run to sev-

eral millions. As stated above, in the great depression of the nineteen thirties it was variously estimated at from eleven to fifteen millions.

The problem of business depressions is much more than one of unemployment. The business cycle is a sort of undulating fever that affects all parts of the economic body, and its causes lie deep in the systems of money and prices which constitute the regulating mechanism of industry. Therefore this is not the place to inquire into those causes. The whole question is reserved for more extended discussion in the chapter entitled "Economic Fluctuations," which comes later in this volume.

Minimum Wage Unemployment.—The law of substitution, which is an essential part of the price mechanism for maintaining full employment, depends on a downward movement of wages to correct any oversupply of labor. This is in accordance with the fourth assumption underlying the theory developed above. The law presupposes that, if the effective supply of workers at existing wages exceeds the effective demand, wages will fall until labor becomes cheap enough to induce enterprisers to substitute it for capital, until all the wage-earners that are willing to work for the reduced wage will be able to find jobs. If there is in the economy any effective obstacle to a decline in wages, this mechanism cannot operate, and the substitution of labor for capital will not take place. Unemployment may then persist indefinitely, or until relieved by some fortuitous event, such as a war, increased accumulation of capital, or the development of new industries that require larger proportions of labor than those existing previously. Unemployment from this cause must be attributed to rigid institutions which prevent the mechanism of wages from operating according to its natural tendencies.

There is just such an obstacle in the policy of labor organizations to resist tenaciously any downward pressure upon wages. They not only do this by direct action, such as strikes and the threat of strikes, but indirectly, by pressing for governmental measures to prevent low wages, such as the Wage and Hour Law of 1938, which set a minimum to wages. Even private charities have some tendency to reduce the force of downward pressures on wages, by increasing the power of labor to resist wage decreases.

All such policies as these tend to create unemployment whenever changes in the economy move in a direction unfavorable to labor—as sometimes they must. There is good reason for believing that the extraordinary unemployment of the period between the two world wars was partly due to such causes. At that time the world's economy was so badly disrupted that a general and prolonged depression, with a huge amount of unemployment, occurred. A fall in wages in these circumstances would have helped, not only to provide more jobs, but, by reducing production costs, to hasten general recovery. Instead of this, the combined pressure of organized labor and the government prevented wages from declining, with the result that the depression was prolonged. Not until the Second World War came along, with

its monetary inflation and its enormous governmental demand for war goods, was the situation relieved.

Unemployment of the kind here described can be explained by the diagram of Figure 4. Here the curve SS represents the schedule of supply as it would be if it were based on the independent decisions of individual workers. Taken in conjunction with the demand (DD), this would lead to establishment of the wage OW_1, and at this wage the number of persons

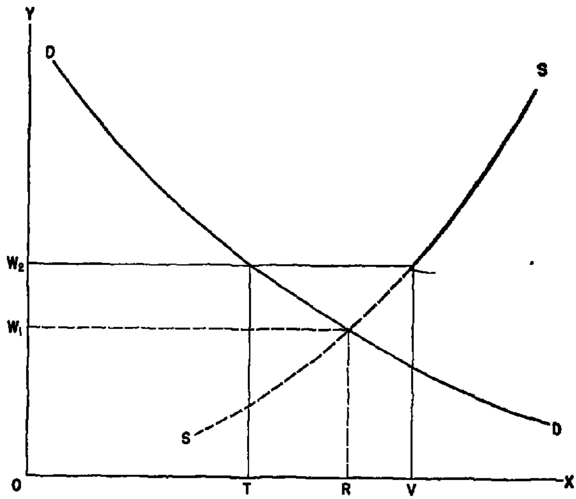

FIGURE 4. Minimum Wage Unemployment.

employed would be OR, which constitutes full employment, since it would give a job to every worker who was willing to work at that wage. But the wage is not allowed to fall below OW_2, hence the number employed is only OT, and there is a residue of unemployed, represented by TV. (The unemployment is TV rather than TR because at the higher wage the number of workers seeking employment is greater.) The part of the supply curve that is dotted is rendered ineffective by the arbitrarily established minimum wage.

Keynes' Theory of Chronic Unemployment.—In every severe long depression there have been prophets of doom to assert that the economy was running down. It is not surprising that such prophets appeared in the great depression that occurred between the two world wars. In this case the two leading pessimists were Keynes in Great Britain and Hansen in the United States. Keynes set forth an elaborate theoretical argument in support of his view. Briefly, his theory is as follows:

In wealthy societies the people are so rich that their "propensity to consume" is low; that is, they save an increasingly large proportion of their incomes. In the "mature" economies where this condition prevails, the opportunities for profitable investment of these savings are restricted by the fact that the frontier has disappeared, and the rate of population growth has slowed up. (Hansen stresses, as an additional cause of restriction, the alleged lack of new inventions, an extraordinary wave of which sustained the economic expansion which took place in the nineteenth century and the early part of the twentieth) The result of these conditions is a saturated investment market in which, because of the tendency toward the diminishing productivity of equipment, the prospective yield from additional investments is very low. Hence, the large accumulation of monetary savings could not be utilized profitably in industry unless these savings could be borrowed at very low rates of interest, presumably at less than two per cent. The costs and risks of lending, together with the influence of liquidity preference, prevent interest rates from falling to so low a figure. Thus the savings are held in the form of money instead of going into investment. This causes a shrinkage in the circuit flow of money, the money paid out by enterprisers to the owners of productive factors does not all flow back in the purchase of goods, with the result that total demand falls short of total costs. The reduced flow of money causes money incomes to shrink and prices to fall, which precipitates a depression of business and a reduction in the employment of both labor and capital This must go on until the volume of production has shrunk to the point where, because of reduced real incomes, people no longer save a surplus over what can be invested profitably. When this point has been reached, money savings will all be used for the purchase of investment goods and the continuity of the circuit flow will be restored The economy will now be in equilibrium, but it will be at a relatively low level in which not all the labor that is willing to work at prevailing wages will be employed There will be a permanent residue of idle workers.

It will be observed that this argument denies the validity of the first, third, fourth, and fifth premises of the neoclassical theory of employment. It asserts that the desire for goods (Keynes' propensity to consume) is not unlimited, at least consumption expands at a decreasing rate as incomes increase, so that larger and larger proportions of income are saved in spite of low interest The circuit flow of money is not continuous; it is interrupted by the holding of savings in money form (instead of using them to purchase equipment) when there are not suitable opportunities for investment. Neither money wages nor rates or interest are flexible in a downward direction, hence the mechanism relied upon to give effect to the law of substitution fails in a mature economy Finally, the rate of interest does not achieve a balance between consumption, saving, and investment, partly because it cannot fall

low enough, and partly because a low rate does not check saving sufficiently in an economy where incomes are very large.

The *possibility* of the situation pictured in this theory cannot be denied. There is no flaw in the logic of the argument, and it is conceivable that the condition described might occur. However, the opinion that such a situation actually did prevail in the period between the two world wars, or that it is an imminent postwar prospect, seems to be too pessimistic. There must still be extensive opportunities for profitable investment in new industries in the domestic American market. Science and invention are always at work opening up new vistas of progress, and it has not been proved that the scope of their achievements in this direction is now declining. Too much stress is laid on the fact that certain spectacular developments of the preceding century, such as the mushroom growth of the railroad and automobile industries, have run their course. Who can say that equally spectacular industrial development (applications of atomic energy, for instance) are not just around the corner? The fact that we do not at this moment know what they are is no reason for assuming that they will not appear. Even if they do not, we must not overlook the steady march of less conspicuous improvements that are always going on, and the importance of which is much greater than is commonly supposed. And if the domestic market be saturated, the possibilities of the foreign market have hardly been scratched. In China and other parts of the Orient, as well as in South America, there are millions of people whose incomes are now low, but whose consuming and purchasing power will be enormous when the exploitation of the great resources of those areas is once well under way. Keynes and Hansen have taken too myopic a view of the interwar years, and have been made unduly pessimistic thereby. There is a sufficient explanation of this unemployment on other grounds, which makes it unnecessary to accept their gloomy prophecies.

The Effects of International Disturbances.—The modern economy is to a considerable extent a world-wide one that depends for full-scale, continuous operation upon uninterrupted international trade. If this trade is seriously interfered with by such obstacles as prohibitive tariffs, embargoes, import quotas, exchange controls, currency manipulations, and other barriers, considerable sections of industry may be put into difficulties and much unemployment may result. In the period following the First World War, obstacles of this kind were widespread, especially in Europe. On a continent already impoverished by the destruction of capital and the interruption of industry occasioned by the war, there was an upsurge of nationalism which caused each country to seek trade advantages for itself, while attempting to block imports from other countries. The result was a general breakdown in the world's commerce, which caused trade to fall to a fraction of its prewar level. This was aggravated by an epidemic of currency depreciation in which monetary values were so unstable that it was impossible for businessmen

to enter into foreign contracts without great risks of loss. Added to all this was the problem of finding work for millions of soldiers discharged from the armies. These conditions suffice to account for the extraordinary unemployment of these years, without jumping to the gloomy conclusion that the world's economy is running down.

C. The Reduction of Unemployment

The Obstacles to Full Employment.—The drift of the foregoing analysis is that the long-run forces of the price system work toward the full employment of labor and capital, so that in an economy characterized by institutions favorable to the free play of those forces, substantially full employment (making some allowance for an irreducible minimum of frictional lag) would in fact be maintained. An exception to this statement would have to be made in case the unusual circumstances posited by Keynes' theory should be realized, but there does not seem to be any convincing reason for believing that these circumstances now exist in our economy, or are likely to do so in the near future. The large amount of unemployment that arises from time to time in our world is due to the unfavorable setting in which the price system is compelled to operate by our present economic institutions.

The unfavorable circumstances which constitute obstacles to full employment appear to be the following:

The impossibility of securing a nice adjustment of supply to demand at every point in an intricate economy where the decisions concerning production are made by many thousands of independent enterprisers, each acting on his own judgment, without adequate knowledge of the total market situation.

A lack of suitable organized arrangements for dovetailing labor at one point in the economy with a shortage elsewhere.

A very bad system of money and banking which lends itself to alternating waves of inflation and deflation.

Extreme inequality of incomes, tending to restrict the purchasing power of the mass of consumers while stimulating a surplus of savings on the part of the rich.

The stubborn resistance of organized labor to any downward pressure on wages, and the adoption of legislation and of governmental policies to the same effect.

The fact that the risks of investment which are unavoidable in an unplanned economy prevent interest from falling below a certain minimum.

Disruptions of world economy occasioned by war, and the breakdown of international trade caused by nationalistic tariff and monetary policies.

Possible Measures to Remove These Obstacles.—These causes of unemployment can certainly be reduced to a very considerable degree, though

some of them can hardly be entirely removed within the framework of capitalistic institutions. Among the remedies to be sought are:

A greater measure of centralized planning and guidance of the economy as a whole, to achieve better coordination of specific demands and supplies. This interesting possibility is the topic discussed in the concluding chapter of this book.

Extension and improvement in the already existing system of government employment agencies, in order to facilitate the transfer of labor from regions or occupations where the supply is excessive to those elsewhere in the economy where there are suitable opportunities for employment. This is developed more fully in a paragraph below.

A program of adult training, coordinated with the employment agencies, to teach workers new skills when the demand for old skills is being reduced by new methods of production.

Reform of our system of money and banking along the lines to be developed in Part IV of this volume.

Reduction of income inequality by adoption of the measures suggested in Part VII.

Encouragement of the settlement of wage disputes by negotiation between organized labor and organized employers, with government protection of the legitimate rights of labor, conditioned upon a willingness on the part of labor organizations to accept flexibility of wages in both directions as economic conditions in particular labor markets change.

Reduction of investment risks by the overall economic planning and coordination suggested above.

Development of machinery for the preservation of international peace, for monetary stabilization, for freedom of trade and investment, and for general economic collaboration.

It is evident from these suggestions that the problem of unemployment is not to be solved by a few specific measures directed primarily at it, but requires basic changes in various parts of the economy, and in international relations. Progress is being made in the needed directions, but attainment of the desired objectives will be slow. In the meantime, there are certain lines of action, dealing directly with matters of employment, that will mitigate the seriousness of the problem. These include: public labor exchanges, public works, vocational training and re-education, and unemployment insurance. The first two of these will be developed in the paragraphs immediately following, the other two in the next chapter.

Public Labor Exchanges.—In so far as unemployment is frictional, a better organization of the labor market can do much to reduce it. It is costly for employers to interview indiscriminate lots of applicants (many of them entirely unsuited for the work to be done) attracted by "Help Wanted" advertisements in the newspapers, or (if the local supply of labor is in-

adequate) to send out scouts to recruit workers in other places. It is wasteful of labor's time and energy to tramp the streets in search of work, often not knowing where vacancies exist, nor whether they are qualified for such opportunities as there may be. Besides, this method does not acquaint them with opportunities away from their home towns. It is much more efficient to have central labor exchanges or employment offices, where employers can make their needs known, and workers seeking employment can file records of their experience and qualifications. Such an exchange can survey the labor market in its locality and send applicants directly to places for which they are qualified, saving employers much of the work of sifting applicants, and saving the workers much loss of time and energy. A coordinated system of such exchanges, nation-wide in scope, can go further, by directing workers from parts of the country where jobs are scarce to other areas where men are needed.

There are numerous private employment agencies which do some work of this kind, charging a fee for their services. Employers associations and labor unions have sometimes maintained similar agencies, and there have been a few supported by philanthropic organizations. All of these usually specialize in employment of particular kinds, and their field is generally limited to a given locality. They do not meet the need for a comprehensive organization of the labor market on a national scale.

England established a national system of employment exchanges in 1910, and similar systems also have been established in Canada and most of the nations of Europe. In the United States a number of states had set up free public employment offices before the First World War. During that war a United States Employment Service was established. This was put on a more permanent basis by the Wagner-Peyser Act of 1933, which provided funds for the coordination of existing state agencies and the formation of new offices. Under this program, the federal government agrees to match funds appropriated for labor exchanges by the states, and the whole organization is administered by the director of the United States Employment Service. The system provides free placement of workers and facilitates the transfer of workers from surplus to shortage areas. Where state programs are not established, organizations under direct federal operation may be set up, but the intent of the law is to leave the initiative and organization primarily in state hands This has its weaknesses, but a federal coordinating agency can accomplish much through cooperation with the state organizations, in spite of the lack of centralization During the Second World War the state employment offices were placed under federal control by executive order of the president, but after the war they were returned to the states.

While a system of public labor exchanges can do much to solve the problem of frictional unemployment, it cannot find jobs for workers where no such jobs exist. Neither can it compel employers to hire workers if wages

are too high to make their employment profitable. Therefore, this machinery will prove inadequate to deal with cyclical and minimum wage unemployment, and it cannot overcome the lag in reabsorption of workers if the pace of displacement by technological innovations is very rapid.

Reducing Hours of Work.—It has frequently been urged that unemployment could be reduced by shortening the length of the working week. Indeed, the 1938 law setting a forty-hour working week as the maximum eventually to be reached in this country was presumably based at least partly on the theory that it would increase the demand for labor, and thereby help to absorb into industry the millions of workers then unemployed.

It is true that in a period of unemployment, when for the time being there is not enough work to go around, some work for the unemployed can be made available by shortening the working time of those who have jobs, provided there is no increase in wages per hour. In order to maintain the current output of goods, employers will then have to hire more laborers, which they can readily do because their total wage disbursements will be no greater than before. By this device what work is available will be spread over a greater number of persons, those who were formerly employed on full time being forced, by part-time employment, to share their earnings with those who were formerly unemployed. During a period of widespread cyclical or technological unemployment this is a defensible policy, for it is better to keep most of the people working at reduced earnings than to have some working full time at full wages, while others are out of work and earning nothing

However, it is usually proposed, by the sponsors of the shorter work week, to keep weekly wages the same as before, increasing the wage per hour to compensate for the lesser number of hours. This is a mistaken policy, for it would defeat the object of giving work to a greater number of persons. Unless hours of work have hitherto been so long as to impair the efficiency of labor, there is not much reason to suppose that the reduction of hours will be accompanied by an increase in hourly output. Therefore, employers will have higher labor costs per unit of product, and will be forced to raise prices correspondingly This means that consumers will buy less goods than before, so that effective demand will be reduced in proportion to the shortening of hours. Moreover, the higher costs of labor are likely to stimulate the introduction of labor-saving devices So, it appears that reducing hours of work not only will not increase the demand for labor, but may even reduce it. At best it is a palliative—a temporary expedient to be resorted to in emergency for the purpose of distributing more equitably the burden of unemployment.

This is not to say that there is no justification on other grounds for shortening the working week. Where hours of work are so long as to impair the health of the workers, they should certainly be reduced Moreover with

the greater output of material goods which modern production methods make possible, not so much labor has to be devoted to providing the necessities of life. There is more opportunity for recreation and leisure, which is a sufficient reason for a permanent reduction in working hours. But let the case for the shorter week rest on that basis—not on the fallacious view, so widely prevalent, that the market for labor is permanently limited, and that therefore there is no longer any hope of full-time employment for everybody.

The Timing of Public Works as a Remedy for Unemployment.—A method of combating unemployment, that has been widely advocated in recent years and that has actually been used to some extent, is the carrying on of public works by governmental bodies in order to provide jobs for those who are not employed by private enterprises. City, state, and national governments are continually undertaking large construction projects for public buildings, highways, dams, bridges, and the like. If these projects were planned long enough in advance, the actual work of construction could be concentrated in periods of business depression, when the spending of government money for them would offset in part the decline in private spending. In periods of business recovery the government program could be tapered off. In this way the construction of public works could be dovetailed with the ups and downs of the business cycle, helping to stabilize business activity in general, as well as employment.

This principle was applied to a limited extent in this country in the depression of 1921, and more extensively in the great depression of the 1930's when Congress authorized the expenditure of several billion dollars for works projects of various kinds. Under the Public Works Administration (popularly known as PWA) an ambitious program of public works construction was inaugurated. This was later supplemented by the Works Progress Administration (WPA), which was set up to promote scattered small projects in which direct labor costs predominated. Here and there roads were improved, sewers were installed, etc., creating jobs chiefly for manual workers; and civic orchestras, theatrical enterprises, and research investigations were promoted in order to give employment to artistic and professional people. By December 1937, there were over one million and a half workers on the WPA payroll, and just over one hundred thousand on the PWA. Even this fell far short of meeting the terrific unemployment problem of that period.

Although the timing of public works has a useful place in a program for dealing with unemployment, the policy has its limitations. If the device is to be used effectively, public works projects must be based on intelligent, far-sighted planning by government officials. Politicians will have to be restrained from the reckless spending of public moneys in times of prosperity, in order that reserve funds can be accumulated for construction work

in times of depression. Even with such planning, it is difficult to carry out the program in a genuinely constructive way, because there is a strong prejudice against governmental use of idle labor to produce ~~the things~~ that are really needed in a period of industrial slump. It is a failure in some sector of industry that produced the breakdown, but the government is not allowed to start up production in this sector because that would be an intrusion upon the system of private enterprise, and a state incursion into these fields, by raising doubts concerning future government policy, would retard resumption of activity by businessmen. So, in a depression our economy is plunged into the anomalous situation where there are millions of unemployed workers who need food and clothing that they do not have the means to buy, where industry is unable to produce that food and clothing because the workers cannot buy it, where the workers would have the means if only they were employed, where the state has the necessary financial resources to employ them and so set the economy going, but where it dare not do so. Instead of setting the idle men at work upon the things for which there is the most obvious need, government is forced to concentrate on a few types of projects, such as road and building construction, hastily improvised "made" work, and activities of the "boondoggling" type. While some of these are useful, many are wasteful, and they do not always provide employment suited to the capacities of the workers who have been displaced from private industry.

A Broader Program of Public Spending.—Those who are persuaded of the truth of the Keynes-Hansen theory of the causes of unemployment are currently espousing a program of public expenditures that goes far beyond the mere concentration of public works in periods of depression. Believing that the contemporary world is threatened with the possibility of chronic unemployment because of a deficiency of private investment, they reason that the gap in such investment should be made up by a sufficient amount of public expenditure to compensate for it. Such expenditure need not consist only of public works construction projects, but may include social security payments of the sort to be explained in the next chapter, and, if necessary, other forms of relief.

The Federal Employment Act.—Even if we do not accept this theory, there is much to be said for the view that it is the responsibility of government to give employment to idle workers if private industry cannot provide them with jobs. This responsibility is recognized in the Federal Employment Act of 1946, popularly known as the Murray Full Employment Bill. While this bill does not guarantee a job to everyone, it does clearly recognize the obligation of the federal government to take steps for the maintenance of full employment. The law creates an Economic Council of three members, appointed by the President, which is charged with the duty of preparing an annual report on economic conditions in the country, together with a forecast of probable trends in employment and production. The report is to

include recommendations designed to maintain a high level of employment and prosperity. The law also provides for the establishment of a Joint Congressional Committee on Economic Conditions, consisting of fourteen members—seven from the House of Representatives, and seven from the Senate. This committee will work with the Economic Council and sponsor a legislative program in Congress designed to accomplish the desired objective.

Although the background of discussion out of which the Economic Council and the congressional committee developed had in view primarily the supplementing of private employment by jobs created through public expenditure, the work of these two bodies need not be confined to the planning of public works projects. Their program may eventually develop into a more comprehensive scheme of national economic planning. The significant thing is that if full employment is actually to be provided by government action, it will require sweeping measures of control dealing with various aspects of the economic process. Thus the problem of unemployment merges with many other economic problems that will be considered in later chapters of this book—problems of business cycles, of international trade, of public finance, and of general economic planning.

What Management Can Do.—The problem of unemployment in its broader aspects is beyond the control of individual businessmen; yet there are some things that enterprisers can do to reduce seasonal layoffs and casual fluctuations in their labor forces, by adopting policies that will tend to stabilize their activities. They can plan ahead so as to anticipate peak demands by producing surplus stocks during dull periods. The inducement of lower prices can be used to persuade customers to purchase in off-peak seasons. Extensive advertising can sometimes build up an all-year-round demand for a product which would otherwise be seasonal. It is also possible for concerns to take on side lines which dovetail with the dull periods of their principal products. Employers can follow careful employment and placement policies which will reduce the turnover of workers in their employ, and thus help to reduce the size of the idle labor reserve for their particular plants. It is to the advantage of the employers to do some of these things voluntarily. The efficiency movement in industrial management is doing much to promote measures of this kind. But management will never do all that is possible along these lines until some pressure is put upon it to do so. Labor organizations are now bringing such pressure to bear by endeavoring to persuade employers to guarantee a minimum number of weeks of employment to their employees in each year. Some concerns have already put such guarantees into effect. However, this device cannot provide full employment for everybody, because of cyclical depressions which no amount of care on the part of individual businesses can prevent.

Two More Ways of Dealing With Unemployment.—There are two other devices which may be used to deal with the problem of unemployment. One

of these is for the government to guarantee to business enterprisers the sale of their output at prices which will afford them a reasonable return. On the basis of Say's law it should be possible for the government to do this without loss to itself. Since this is primarily a plan to combat business depressions, further discussion of it will be deferred to the chapter "Economic Fluctuations," which deals with that topic. The other device is unemployment insurance, which gives the workers a weekly income during periods of enforced idleness. This will be discussed more fully in the next chapter.

Summary

Our modern economic system is characterized by a large amount of unemployment which constitutes a serious problem. According to neoclassical economic theory, full employment tends to be maintained automatically, through the operation of Say's law and Marshall's law of substitution. The monetary form of Say's law holds that money incomes are identical with money-costs; therefore the total purchasing power of income recipients is sufficient to buy the entire output of industry at prices which will cover the costs of producing it. The law of substitution states that employers will substitute cheap factors for dear factors in production; therefore they will employ labor instead of capital if wages are relatively low enough. These two laws combined establish the proposition that the effective demand for labor should suffice to employ all the labor available, although not necessarily at high wages. However, these two laws cannot maintain full employment in fact unless the following assumptions are realized: (1) that human desires are indefinitely great; (2) that production will not be misdirected; (3) that the circuit flow of money will not be interrupted; (4) that wages and interest will be flexible; (5) that interest will maintain a balance between consumption, saving, and investment.

Since these assumptions cannot be perfectly realized, the following kinds of unemployment may result: (1) frictional, (2) technological, (3) cyclical, (4) minimum wage, and perhaps (5) chronic unemployment from secular stagnation. Frictional unemployment results from lack of perfect adjustment between specific demands and specific supplies in a dynamic world. Technological unemployment is caused by a lag in the process by which the market reabsorbs labor displaced by mechanical inventions or changes in processes. Cyclical unemployment accompanies periodic business depressions. Minimum wage unemployment results when trade union pressure or legislation will not permit wages to fall to the place where the effective demand for labor will equal the effective supply. According to Keynes ~~and Hansen~~, chronic unemployment is threatened by the increased volume of savings that is accumulated in wealthy communities at the very time when economic maturity lessens the opportunities for investment, so that the savings cannot

be invested profitably without a fall in the rate of interest to an impossibly low level; hence they are not invested and employment declines. Unemployment also results from disturbances of international trade following wars.

Removal of the causes of unemployment calls for basic reforms in various phases of our economy, to be discussed in other chapters. Some specific correctives of limited usefulness are: a comprehensive national system of public labor exchanges, the concentration of public works in times of depression, a broader program of public spending to absorb the unemployed, the stabilization of their plant operations by individual employers, the guaranteed sale of output by the government, and unemployment insurance. Reducing hours of work spreads the amount of employment available over a larger number of workers, but does not increase the total time of labor employed.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

An able work, representing the traditional point of view on the causes of unemployment and methods of dealing with it, is W. H. Beveridge's comprehensive study, *Unemployment, A Problem of Industry* (third edition, 1912). A more recent survey, somewhat less comprehensive in scope, is Paul H. Douglas and Aaron Director's *The Problem of Unemployment* (1931). On the theory of technological unemployement, see Hans Neisser's article, "'Permanent' Technological Unemployment," in *The American Economic Review*, Vol. XXXII, March, 1942, pp. 50-71. H. Feldman's *The Regulation of Employment* (1925) is an excellent discussion stressing the responsibility of employers for industrial regularity and pointing out how management policies can be made to reduce employment. John H. Pierson develops a proposal for maintaining full employment by guaranteeing the sale of output in his *Full Employment* (1941).

John M. Keynes' theory of unemployment, which has aroused much interest and controversy, is set forth (rather obscurely) in his *General Theory of Employment, Interest, and Money* (1936). Alvin H. Hansen's views on secular stagnation can be found in Chapter XIX of his *Full Recovery or Stagnation* (1938). For a more optimistic viewpoint opposing Keynes and Hansen, consult George W. Terborgh, *The Bogey of Economic Maturity* (1945); and Ernst W. Swanson and Emerson P. Schmidt, *Economic Stagnation or Progress* (1946).

CHAPTER XI

Social Security

A. Workers' Insecurity, and Some Preventive Measures

Workers as Risk-Bearers.—Investors and business enterprisers are often represented as the chief risk-bearers in industry. However, this is a one-sided picture which overlooks the very real hazards which confront the wage-earning classes. The risks assumed by workers are quite as imminent as, and in some respects more serious than, those of property owners. The latter face the possible loss of part or all of their property if their business ventures are unsuccessful, but seldom are they completely ruined by such misfortunes. Moreover, the businessman is often able to shift a considerable portion of his risks to his employees, for one of the first things he does when times are bad is to lay off a part of his labor force, thereby reducing his own losses at their expense. At such times other employment may not be obtainable. The workers are then faced with unemployment, which is a major disaster for them, as we have already learned. In addition to unemployment, wage-earners are subject to other dangers, such as diseases growing out of the nature of their occupations, and loss of life or limb from accidents which occur in connection with their work. These catastrophes are very serious, for they may leave their victims permanently disabled and with their earning capacity very much reduced or entirely gone. Society has been slow to recognize the importance of the problem created by these hazards. At first it regarded the matter as an individual one with which it need not concern itself; but gradually it has become evident that something ought to be done to protect the wage-earners from loss and dependency growing out of such causes. It is such protection that is implied by the term "social security" (although "economic security" would be more appropriate).

The nature and causes of the unemployment hazard have been sufficiently described in the last chapter, but the other risks of workers are yet to be explained.

Industrial Accidents and Occupational Diseases.—In many occupations the employees are in constant danger of being injured from one kind of accident or another. A hand or an arm can be mangled in whirring machinery; eyes may be blinded by explosions or flying specks of metal; skulls may be fractured or necks broken by falls from a building under construction; rock slides and escaping gases are an ever-present threat to miners; railway

workers may be killed or maimed in train wrecks. Each industry has its own particular hazards. The number of accidents from such causes is very large. No less than 25,000 deaths, an equal number of permanent disabilities, and nearly two million injuries incapacitating the victims for more than three days each, result every year from industrial accidents in the United States.

Illness is another calamity that is often a direct result of employment, There are many kinds of occupational disease which arise out of conditions under which people work. Working in air that is filled with dust or mineral particles subjects the wage-earner to the risk of contracting tuberculosis or silicosis. The handling of cattle sometimes causes the disease known as trachoma. Exposure to heat and cold may lead to pneumonia. Working with radium, as in producing luminous dials for clocks and watches, introduces a dangerous poison into the system which is likely to prove fatal. The manufacture of tetra-ethyl lead, now used so widely in automobile gasolines, may cause a kind of insanity, which has also sometimes proved fatal. A great many other examples could be cited from a wide variety of occupations.

Industrial accidents and occupational diseases can be very much reduced by preventive measures. Accidents can be kept at a minimum by the use of safety devices, such as guards to prevent clothing or fingers from being caught in whirring machinery, goggles and masks to keep flying particles out of eyes, safety gates on elevator shafts, and so on. Much can also be done through a program of safety education directed at both employers and employees, and by the proper training of workers in the handling of dangerous materials and machinery. The toll of occupational disease can be materially curtailed by surrounding the workers with sanitary and healthful conditions in the factory, and by frequent medical inspection to discover incipient trouble and to prescribe proper preventive measures before illness assumes a serious form. Unfortunately, not all employers can be relied upon to take such measures voluntarily. There are always some progressive ones who will do so on their own initiative, but the laggards and less considerate businessmen will not, unless compulsion is used. Therefore, it is important that laws should require the use of protective devices and the maintenance of healthful working conditions and reasonable hours of employment, and that these laws should be supplemented by factory and mine inspection at frequent intervals, to see to it that their provisions are carried out. Such legal machinery is not only a matter of humanitarian sentiment,—it is essential for economic efficiency, for it prevents waste and loss of human producers and conserves them to increase the productive output of our industry.

Premature Old Age.—The pace of mechanized production often shortens the life of industrial workers. The nervous strain of monotonous, repetitive labor, performed day in and day out at high speed under factory conditions, eventually weakens the human system. This strain is often aggravated by

the speeding up of production during the seasonal peaks of activity which are common in almost every industry. The situation has become such that many employers will not take on a new employee who has reached middle age in life. In a study made by the National Association of Manufacturers, 30 per cent of the firms who replied to a questionnaire admitted an upper age limit for hiring workers ranging from 25 to 45 years.[1] At the very time when this shortening of the working life is going on, medical science and modern sanitation are increasing the average life expectancy of the American people, thus leaving a longer period of old age to be faced after the working period is over. Among the well-to do, retirement at a moderately early age does not present a serious economic problem, but the average workingman's earnings are small, and it is difficult for him to lay by sufficient savings to provide for his support when the feebleness of later life renders him no longer fit for remunerative employment If this problem were simply an inevitable result of having reached advanced years of life, it might be regarded primarily as a question of charity; but the fact that men are retired so early, and that the retirement comes out of the industrial methods that now prevail, raises the issue of whether we are not wasting man-power, and whether employers are not escaping from a burden for which they are largely responsible. In any event, it is a social problem which cannot be overlooked in any program designed to improve the well-being of the whole of society.

Loss of Market for Skill Through Technological Change.—Although the workingman does not usually have much, if any, material capital invested in industry, he does have a kind of human capital, embodied in his own skill, which represents an important form of investment by him. He may have devoted years of training and experience to the acquiring of this skill, and the higher wages he is able to earn because of it represent a return on his investment, comparable in some respects to the interest and dividends of the capitalist The market for this skill may be lost through changes in the nature of the commodities used in everyday life When the horse and carriage gave way to the automobile, blacksmiths, harness-makers, and the like were no longer needed To be sure, there arose a new demand for skilled workmen in the automotive industries far exceeding the former demand for the displaced wage-earners, but a blacksmith or a harness maker, especially if no longer young, could hardly qualify for the new occupations. He was faced with a new situation in which the skill which for many years had supported him at good wages was no longer demanded, and he probably had to accept unskilled employment where his earnings were considerably less. The replacement of kerosene lamps by electric lights, of orchestras in silent motion picture theaters by talking pictures, of coal-burning furnaces by oil burners, and many similar developments, have meant loss of earning power

[1] Quoted in Harry W Laidler, *A Program for Modern America* (1936), p 92

for thousands of employees whose special qualifications lost a market through the disappearance of the industries where they were in demand. It is the same when a change is made, not in the product itself, but in the method of producing it. There is hardly an industry in which new machine processes are not continually displacing some form or other of skilled labor. The hand compositor finds himself replaced by the linotypist, the glass blower gives way to the glass-blowing machine operator, the skilled lacemaker yields to lace-making machinery, and so on. In every such case a difficult problem of readjustment faces the displaced workers.

Vocational Training and Rehabilitation.—The development of an adequate system of industrial training for both young people and adults will help workers to avoid the disastrous results of some of the risks that have been described, by enabling them to adapt themselves better to their changed situations. Such training can be utilized to rehabilitate the victims of industrial accidents or disabling diseases, by teaching them new skills compatible with their physical handicaps. By diversifying the skill of workers, so that they can qualify for more than one occupation, it eliminates the dependence of an individual on a single industry and may thereby help to reduce seasonal unemployment. An important contribution which such a program can make is to equip all workers for some definite trade or trades. It is among the unskilled who lack such training that irregularity of employment is most prevalent. Much progress is being made along this line through compulsory education laws which prevent children from leaving school at an early age in order to enter unskilled occupations. In many of our public school systems, also, vocational courses are being introduced, which at least start the boys and girls in a course of training for some skilled trade. The development of continuation schools, carried out through cooperation of employers and school officers, which carry on the education of young workers for some months or years after they leave school, is likewise a helpful step in preventing them from falling into the ranks of unskilled casual workers. It is also possible to utilize the idle time of adults during periods of unemployment by placing them in classes which will train them, either for more skilled work than that which they have been doing, or for work of equal skill in some other industry, in case the demand for their type of labor has disappeared.

Vocational training of adults may likewise be of some assistance in making workers who are past middle age valuable to employers. However, this has its limits, for training alone will not make a person fit for work if his health has been broken down by the fast pace of industry. That calls for more healthful conditions of work, or, possibly, a working day of shorter length. Neither will it make employers willing to hire older workers if they have a preference for younger ones. That may call for some re-education of employers. The major problem of finding jobs for substandard workers,

whether their substandard status be due to lack of training, accident, illness, or old age, is to create a demand for labor so insistent that employers will be forced to hire them for lack of available workers. So long as the effective supply of labor exceeds the demand for it, employers will pursue a selective policy of hiring, under which the better trained and more efficient workers, for the most part, will continue to hold their jobs, while those who are least efficient will be unemployed. Let the demand for labor be sufficiently strong, however, and the less efficient will be employed at such tasks as they are capable of performing.

B. Social Insurance

Business Costs and Social Costs.—In spite of all that can be done along the lines suggested above, and in the preceding chapter, to reduce the risks of workingmen, they cannot be wholly eliminated. Some incapacity resulting from accidents and occupational diseases, some old age dependency, and some unemployment will still remain. In an individualistic society, the burden of meeting these risks falls upon the workers, who are often either unable or unwilling adequately to provide for them. The great masses of workingmen do not look ahead to the future with as much foresight as they might, and are inclined not to anticipate the distress that may come upon them from unforeseen misfortunes. Moreover, the incomes of wage-earners are often too small for them to accumulate sufficient savings to shoulder this burden. The result is that, when disaster occurs they must rely upon private philanthropy or public charity. So the burden of caring for them constitutes a social cost which must be met by the community in one way or another.

Would it not be better for these costs to be assumed by industry? Since all of the risks with which we are here concerned arise out of industrial conditions surrounding the workers' employment, it would be logical to charge the cost of supporting these workers to the industries involved. Just as the expense of repairing a machine which breaks down in use constitutes a cost which must be recovered from the price of the commodity, so should the medical expenses of a worker injured in the course of his employment be similarly charged to the cost of production. By similar reasoning the dependency of old age is just as truly an industrial cost as is the depreciation of capital, and the burden of supporting unemployed workers just as truly a cost as the overhead expense of maintaining an idle plant. But these workers' costs do not appear in the accounts of the businessman, so long as he is not responsible for paying damages or wages to his workers when they are incapacitated or unemployed. When accidents or illness occur, or when business activity is slack, he lays off the workers and throws the burden of their support upon society. This suggests that we need a device which will convert the social cost of maintaining labor under such conditions into

a business cost which will appear in the accounts of the businessman. The needs of the worker will then be cared for in a more business-like fashion, and (what is equally important) a strong incentive will be put upon management to reduce such costs to their minimum by preventive measures. Social insurance is a device that can be so designed as to accomplish that purpose.

The Nature of Social Insurance.—The risks of workingmen are in many respects similar to such risks as those of fire and death, which are commonly dealt with by insurance. The method of insurance is appropriate to meeting any risk that is widely distributed, frequent in occurrence, and capable of being measured statistically. Insurance pools the risks of a great many individuals in a common fund, to which all contribute a small payment, and out of which the losses of particular individuals are paid. By this means the chance of catastrophic loss to particular individuals is transformed into a small regular cost, shared by all those who participate in the insurance project. It is mutual risk-bearing.

When this principle is applied to the risks of workingmen on a large scale, with government encouragement, compulsion, or participation, it is known as social insurance. Sometimes it is known simply as workingmen's insurance. It is applied to such contingencies as industrial accidents, sickness, death, invalidity, old age, and unemployment. Some forms of working men's insurance are voluntary, depending upon the willingness of the workers to pay the premiums to insure themselves, but it has usually been found that this method does not reach the people who need it most. Therefore, compulsory social insurance, in which the government uses its power to see that all the workers needing protection are covered by it, has come into vogue. This appears to be the most satisfactory method of providing for the losses which workingmen suffer from the risks described.

Social insurance also differs from insurance of the ordinary kind in that the cost of it is not usually borne entirely (and sometimes not even partly) by the persons insured. Since the employer is partly responsible for the risks run by his employees, it is felt to be just that he should bear a part (or even all) of the costs of insuring them. Moreover, this accords with the principle, explained above, that business accounts should be made to include the social costs of protecting workers against the losses occasioned by the risks which they encounter in their employment. The state also sometimes contributes to the insurance funds out of its general revenues because of its interest in this essentially social problem, and because, where such insurance is not available, the state is likely to have to provide for relief of the poverty brought about by workers' risks.

National Social Insurance Systems.—Compulsory social insurance began in 1883 with the passage of an accident insurance act in Germany under the influence of Bismarck, who sought to combat socialistic propaganda by

developing a paternalistic state which would look after the interests of its working classes. The system was soon extended to sickness and old age dependency. Following the example of Germany, other nations adopted similar measures, so that, by the outbreak of the First World War, comprehensive systems of national social insurance had become an established institution in most of the countries of Europe, as well as in Australia and New Zealand. As a result of this legislation, fully two-thirds of the people gainfully employed in Germany and several million workers in Great Britain were under the protection of this insurance. At first the risks covered included only accident, sickness, and old age disability, but in 1911 Great Britain adopted its National Insurance Act, which included protection against losses from unemployment also By 1920 this act had extended its coverage to more than twelve million people In the interwar depression Germany also adopted a system of unemployment insurance, and this feature was eventually incorporated into the insurance schemes of most countries.

Impartial observers of these systems substantially agree in the judgment that they have been reasonably successful, except in the case of unemployment insurance. None of the unemployment funds was prepared for the extraordinary drains made upon them by the serious interwar depression. As a result they incurred huge deficits which had to be made up by loans or outright grants from the state. Although the payments made to the worker under the insurance plans are very modest, seldom amounting to more than half the wages he has customarily earned, they do assure him a minimum of support during periods when he is unable to earn wages, and they have certain incidental advantages As a part of his sickness benefits, for instance, the insured worker receives free medical and hospital care, and the health services which have been built up in connection with this insurance have been a valuable feature of the systems In connection with unemployment insurance, nation wide systems of labor exchanges have been established which help to organize the labor market along the lines suggested in the preceding chapter There is no doubt that social insurance has become a fixed institution in those countries which have experimented with it, so that there is little question about its permanency. In the case of England, indeed, the idea of social insurance has become so generally accepted that, at the close of the Second World War, a government commission brought in a remarkable report, recommending a wide extension of the system that would insure every Englishman (regardless of his economic position) "from the cradle to the grave." With the British Labor party in power, steps are being taken to put this program into effect

The United States was slow to adopt a similar system, partly because of the stronger hold which the philosophy of individualism has upon our people, and partly because of our peculiar legal institutions The greater freedom of opportunity and the relatively high wages prevailing in this country

seemed to make social insurance less necessary, while our system of state sovereignty made it difficult for the federal government to inaugurate such a scheme. Initiative had to be left to the several states, which were tardy in recognizing the need. Notwithstanding these difficulties, considerable progress was made in the development of accident insurance, through state workmen's compensation laws, and a few states adopted other forms of social insurance; but not until 1935, with the passage of the Social Security Act, did we make any significant move toward a comprehensive national system of social insurance. These developments will now be described.

Workmen's Accident Compensation in the United States.—For many years it was the practice in this country to leave the worker to shift for himself when injured by accidents sustained in the course of his employment. Under the common law, he might sue his employer for damages, but if the employer could show that the worker, through his own negligence, contributed in any way to the injury, or that a fellow employee was partly responsible, the injured worker could not recover. Since something of the sort could be shown in most cases, the employer usually escaped responsibility. The worker then had to foot his own medical bills, suffer a loss in wages during his period of incapacity, and perhaps be permanently unable to resume his former, or even any, occupation. So it became apparent that, if workers were to be adequately protected and cared for, society must find some means of doing it.

Laws compelling employers to insure their employees against accidents have been declared unconstitutional in the United States, but a way has been found to accomplish the same result by so-called workmen's compensation acts. The first of these was enacted by the New York legislature in 1910. Today all but one or two states have some form of workmen's compensation legislation. In a number of the states the laws provide that the employer can no longer make the contributory negligence or fellow workman pleas as a defense against his liability for damages. At the same time they give him the option of paying compensation at certain rates provided in the law, instead of subjecting himself to suit. With his most effective defenses no longer available, the employer is almost certain to lose any such suits that are brought against him. He usually prefers to pay the compensation provided in the laws, and the most convenient way for him to do this is to insure his accident risks with some insurance company that specializes in that kind of business. The compensation laws frequently provide for the establishment of such companies, or this may be left to private initiative. The amount of the compensation varies with the gravity of the injury sustained, in accordance with a schedule provided in the statute.

At present the tendency is to increase compensation, reduce the delay in filing and administering claims, and supervise private casualty companies with greater care than in the past. There is also a trend toward widening

the scope of the laws to include occupational diseases; a number of states and the federal government are now making no distinction between industrial accidents and other sickness directly attributable to industry. The equalizing of competitive conditions by the adoption of uniform state compensation acts is desirable, but it seems to be unlikely of accomplishment in the immediate future, due to the desire of some states to attract industry, even at high social costs.

Rehabilitation of Disabled Workers.—It was explained above that much can be done, by suitable methods of education and training, to help the victims of industrial accidents or disabling diseases to re-establish themselves in occupations that are compatible with their physical handicaps. This is much better than leaving them to depend upon charity for the rest of their lives. Some progress toward meeting this need has been made by the creation (in 1920) of a Federal Board for Vocational Education. The program is one of cooperation between the federal government and the states, under the general supervision of the federal board. The federal government matches funds appropriated by the states, and the work of rehabilitation is under the general supervision of the board. In carrying out the program, the various cooperating agencies endeavor to find the people who are in need of training, advise them concerning possible occupations suited to their capacities and temperaments, train them for such occupations, and find them opportunities for employment. In order to make sure that they have really been rehabilitated, the cases are followed up for a considerable period of time after their initial employment No charge is made for these services. Although this work is pointed in the right direction, it is, at present, reaching only a small proportion of those who need to be helped. It needs to be greatly expanded, and supported by more generous financial appropriations.

The Social Security Act.—In spite of the legal difficulties which stood in the way of national social insurance in this country, for years there had been agitation for the development of something comparable to the social insurance systems which prevailed in Europe. When unemployment became so vast during the great depression of the 1930's, this agitation came to a head. The result was the passage (in 1935) of the Social Security Act. This act has since been amended from time to time. It provides for old age pensions and annuities, unemployment compensation, vocational rehabilitation, security for children, aid to the blind, and extension of the public health services. It also makes a modest, though insufficient, contribution to an industrial training program, by granting some financial aid to the states for the purpose of vocational rehabilitation of the physically disabled. It should be noted that accident insurance is not included, presumably because this form of insurance had already been fairly well developed by the states prior to the passage of this law. Sickness insurance is also lacking.

In order to avoid the constitutional difficulty of infringing upon state

sovereignty, the act allows the several states to formulate their own old age and unemployment insurance systems, but encourages them to conform to certain national requirements by offering a subsidy from the federal insurance funds to those states that meet specified minimum standards For instance, the federal government will contribute as much as twenty dollars a month per person for old age pensions on condition that the states do likewise, and it will return to the states 90 per cent of the taxes it collects for unemployment insurance, if they have satisfactory unemployment insurance systems of their own These provisions place the states in the position of having to set up social insurance systems which will satisfy the federal requirements if they are to receive any benefit from the taxes levied by the act on employers and employees within the state jurisdictions The result is that the states have enacted the necessary legislation, so that there is now in effect a widespread system of social insurance in this country, although it varies considerably in certain details from state to state.

At the head of the system is a Social Security Board of three persons, charged with the task of administering the whole program in so far as it lies within federal jurisdiction It has considerable authority over the state systems of old age pensions and unemployment insurance (although not as much as some critics think desirable), and it manages directly the old age annuities plan presently to be described In addition, it is charged with the task of studying the whole problem of social insurance and making recommendations as to legislation and matters of administrative policy in connection therewith The Chairman of the Social Security Board, the Secretary of Labor, and the Secretary of the Treasury, compose the Board of Trustees of the "Federal Old Age and Survivors Insurance Trust Fund," which consists of the funds collected and held in "trust" under the act. These funds will be discussed below

Old Age Annuities and Pensions Under The Act.—The Social Security Act sets up two distinct systems for dealing with old age. One of these, designated as *old age annuities*, is based on insurance principles It provides retirement annuities for most wage-earners in this country, except the following, who are specifically excluded farm workers, domestic servants, casual laborers, seamen in United States waters, government employees, and those employed by educational and philanthropic organizations. The plan requires the covered employees to pay a tax of one per cent on the first $3,000 of their annual wages, this tax being deducted from their earnings by their employers, and remitted by the latter to the federal government Employers must also pay a tax of one per cent of their payrolls, thus matching the contributions of their workers Originally it was provided that these taxes should be increased gradually to three per cent each, on both wages and payrolls, but these increases have been repeatedly postponed by amendments to the act, so that the rates remain at one per cent Annuities under the plan begin at

the age of 65 and range from a minimum of ten dollars a month up to eighty-five dollars. They are continued until the death of the annuitant. Additional allowances are made for dependent wives, widows, and children. The total number of insurance accounts now carried on the books of the Social Security Board under this plan exceeds fifty million

To provide for the needy aged who are not eligible to old age annuities, or whose annuities under the foregoing plan would be inadequate, there is another part to the old age program, designated in the act as *old age assistance*. This is a system of outright pensions, paid for jointly by the federal and state governments. To secure the cooperation of the states, the Social Security Board is entrusted with the apportionment of a federal subsidy of several million dollars to those states whose old age assistance plans meet certain minimum requirements. The latter are designed to secure centralized and uniform administration of pension plans within the state and to prevent discrimination against applicants for old age assistance. To qualify for federal aid, a state pension plan may not require an age of more than sixty-five years for eligibility, nor that the recipient shall have resided in the particular state more than five years out of the previous nine, nor may it make any provision which excludes a citizen of the United States. Upon approval of a state plan by the Social Security Board, the federal government will match state old age pensions dollar for dollar up to a maximum federal payment of twenty dollars a month for each dependent sixty five years old or older. Inmates of public institutions are excluded In addition, each state receives 5 per cent of the basic subsidy, which need not be matched and may be used for administrative purposes or for direct old age assistance, or both. Under this plan, indigent aged persons will generally receive pensions that will bring their total incomes (from all sources) to forty dollars per month, for the states are not likely to appropriate more than the federal government, and they must offer twenty dollars in order to get the full benefit of the subsidy

Unemployment Insurance Under the Act.—The unemployment provisions of the Social Security Act leave it to the states to formulate their own specific programs The federal government grants the states a subsidy only in an amount sufficient to cover the expense of administering their laws; but there is a federal tax designed to induce the states to adopt unemployment insurance plans This is a tax of three per cent of their payrolls on all employers who have employed eight or more workers during each of at least twenty weeks in a given year; but where employers have contributed to qualified state unemployment funds, such contribution is deductible from the tax up to 90 per cent thereof. Thus a state must have an approved unemployment insurance plan to avoid losing the tax to the federal government. To secure the approval of the Social Security Board, the state acts must contain certain specified provisions All payments must be made

through public employment offices. All money received in the state unemployment compensation fund must be paid into an Unemployment Trust Fund in the United States Treasury, where it is credited to the respective states if their plans are approved. Withdrawals may be used only for compensation payments. Compensation may not be denied to eligibles who refuse available employment because of a labor dispute, or who refuse employment requiring membership in a company union or forbidding membership in a *bona fide* labor organization. Since all state laws must satisfy the same set of prerequisites for approval, some uniformity among them will necessarily result, but a wide measure of state autonomy is granted by the act. Decisions concerning eligibility, waiting time, maximum and minimum benefits, the wage groups to be covered, and the actual running of the system, as well as contributions by workers, are left to the states.

Unemployment among railroad employees in the United States is covered by a special insurance plan, operated by the federal government directly instead of coming under the above program. It is financed by a three per cent tax on payrolls. The benefits are somewhat larger than those usually allowed by the state unemployment insurance programs, ranging from $1.75 a day up to $4, with the proviso that total payments must not exceed ten times these amounts in any two-week period, nor a hundred times these amounts in any one year. Since the plan is national, the benefits are uniform throughout the country.

In providing compensation to workers for periods of unemployment, there is a danger that some will remain idle voluntarily, preferring to live on the insurance benefits rather than to work for a living. To guard against this abuse, it is important that the recipients of out-of-work benefits be required to register with an employment office and to accept suitable employment if it can be found for them. This makes it necessary for a system of government labor exchanges to be operated in conjunction with the program for unemployment insurance, if the latter is to be carried out efficiently. It is also considered wise to keep the payments to the unemployed considerably below the wages they are capable of commanding in industry, in order that there will be a sufficient inducement to them to prefer remunerative employment if they can get it. In dealing with these matters, the Social Security Act requires that state employment benefits, to come under the plan, must be paid through public employment offices or such other agencies as the Social Security Board may approve. However, a state cannot refuse compensation on the ground that employment is available if wages, hours, or other conditions of the work offered are substantially less favorable to the individual than those prevailing for similar work in the locality.

A nice question that arises in connection with unemployment insurance is whether workers who are striking against their employers should be entitled to benefits. They are unemployed, certainly, but the unemployment is

made by their own unions and is thus, in a sense, voluntary. For the state to support them would be equivalent to taking their side, regardless of the merits of the dispute. Yet if they are not given relief, innocent wives and children may be in distress because the family income is cut off, and workers who are prevented against their will from working may also suffer. Most states deny unemployment compensation to strikers, but allow it for those thrown out of work involuntarily by a strike. The Social Security Act protects strikers to the extent of prohibiting the states from denying compensation to unemployed workers who refuse to take new jobs in plants where there is a labor dispute

Minor Provisions of the Social Security Act.—The Social Security Act makes provision for blind persons who are unable to support themselves, by a program very similar to the old age assistance plan. The federal government matches state pensions to the indigent blind up to a maximum of $20 a month. The federal government will also match the states dollar for dollar in caring for children living with parents or other close relatives where there is need for assistance. The maximum payments offered by the federal government for this purpose are $9 a month for the first child in a family and $6 for each additional child.

The Social Security Act also provides financial appropriations for extending the public health program of the federal government, and for increasing the work of rehabilitation carried on by the Federal Board for Vocational Education, which was described above.

C. Desirable Objectives for Our Social Security Program

Sickness Insurance.—The American people sustain a heavy loss every year because of illness. There is not only the cost of medical care and hospitalization, but also the loss of wages and products resulting from inability of the laborers to work during the course of their illness, and often permanent reduction of working capacity because of the ravages of disease. These costs could be greatly reduced by an adequate program of medical care. Such care will not be provided if left entirely to the individual. Many of the people are too poor to pay for it. They have not sufficient reserves to carry them through periods of sickness; therefore they remain at work during minor illnesses, or in the earlier stages of more serious ones, because they do not want to lose wages by staying away. Neither do they want to go to the expense of consulting a physician if it is not absolutely necessary. The result is that much subnormal health is allowed to go unremedied, and many diseases that might have been trifling if taken care of in their earlier stages are allowed to become serious.

This situation suggests the need for including some provision for sickness in the system of social insurance. If all the people are to be covered, such

sickness insurance should be made available to everyone in a manner similar to the provisions for unemployment and old age. It is perfectly feasible to meet the sickness risk by insurance. The occurrence of disease, and the amount of expenditure necessary to provide for it, can be calculated statistically with sufficient accuracy for prediction and the application of actuarial principles. The benefits provided by such insurance should include medical examination and treatment as well as hospital care, and there should be some reimbursement for the loss of wages occasioned by illness. The cost of carrying out such a program would be very heavy, but it would probably repay itself in the greater productivity that would result from the improved health of our people. The increased national income made possible by a working population of sustained good health, and by reduction in the amount of time lost from work through illness, would probably exceed the amounts paid out in insurance compensation

There is ample precedent for comprehensive sickness insurance in the social insurance programs of Europe. Such insurance is provided in Great Britain, Germany, and many other countries. Usually the cost is met by taxes on both wages and payrolls, with sometimes a subsidy from the state Similar arrangements could easily be incorporated into the American social security program Foreign experience indicates that one of the first problems to arise in insurance of this kind is the practice of malingering. A malingerer is a person who feigns illness, in this case to make himself eligible for sickness benefits out of the insurance fund. However, physicians have learned how to detect such frauds, so that the problem is capable of being dealt with satisfactorily. The consensus of authorities who have investigated the results where general sickness insurance has been long established is to the effect that the health of the people has been greatly improved by it.

There is strong opposition by medical organizations in this country to "socialized medicine," which they believe that sickness insurance would bring about. They fear that physicians would lose their private practices, and their independence of judgment and treatment would be hampered by bureaucratic dictation. They argue also that patients would no longer be able to choose their own personal physicians—that they would not receive the same individual care they now do, but would become mere cases in a regimented organization. They point out, finally, that the poor are now given free treatment in the wards of most hospitals, so that there is no necessity for insurance. These arguments overlook the plain fact that there is an urgent need which is not being met under existing arrangements. The health of the masses is not being adequately looked after. Hospital facilities are not usually available in rural districts, and, anyway, people do not go to the wards except under the stress of serious illness They are deterred partly by inertia, partly by unwillingness to stay away from work at the expense of losing wages, and partly by reluctance to undergo the stigma of accepting

charity. They need to have more extensive medical facilities provided as a matter of right, and not as a matter of charity. Sickness insurance need not destroy private medical practice It is perfectly possible to work out a plan whereby the patient is given an allowance from the insurance funds which he can use to pay a physician of his own choice. There will always be room, also, for specialists to develop lucrative practices among the well-to-do, as they do now. The general demand for medical services, and the number of physicians required, under a comprehensive program of sickness insurance would be greater than it now is, so that the medical profession, as a whole, would probably benefit. Besides, the special interests of a private group should not be allowed to stand in the way of a much needed social reform.

In spite of the opposition of organized medicine, there has developed in this country a large number of hospital plans which provide their members with allowances for hospital care on insurance principles. Medical groups have been brought reluctantly to approve these plans, in the hope that they will prove a substitute for more comprehensive sickness insurance. The plans do not meet the need, however, because they reach only a relatively small proportion of the people, and very few plans as yet cover physicians' fees or medicines. The poor, who need such protection most, usually do not feel that they can afford the payments required It is likely that sooner or later we will overcome these difficulties by introducing a national program of sickness insurance into our social security system

National vs. State Systems of Social Security.—Our present system of social security is a mixture of federal and state programs. Accident compensation is exclusively in the hands of the states, old age pensions and unemployment insurance are operated by the states with federal subsidies and some amount of federal supervision, while old age annuities are operated and financed entirely by the federal government. This division of authority results in lack of uniformity and needless complexity Although the Social Security Board has authority to set certain minimum standards, to which the states must conform if they are to receive federal subsidies, there is yet room for wide variation in eligibility requirements and benefits paid. In many states the standards are low and the benefits inadequate. These weaknesses lead many experts in the field of social security to believe that an adequate system can be attained only by having all forms of social insurance centralized in the hands of the national government

There are two obstacles to such centralization. One is inherent in the constitutional provisions that protect the sovereignty of the states. This could be overcome by a constitutional amendment, but it is not likely that public sentiment would support such a move in the near future A second obstacle exists in the fact that there are significant differences in living costs and population characteristics in different parts of the country that would make it difficult to enforce uniform standards in all the states For instance, un-

employment and old age allowances that would be sufficient in the South would be quite inadequate for workers in some of our northern cities. Probably the wisest policy under existing circumstances is to continue a program of state social security systems with federal aid and a certain amount of federal supervision. Greater uniformity and simplicity of administration can gradually be worked out by conferences and coöperation, under the leadership of the Social Security Board.

The Method of Financing.—Two problems arise in connection with meeting the costs of social insurance: (1) who should bear the costs, and (2) how they should be distributed in time.

At present, the costs in this country are met partly by taxes on payrolls and partly by taxes on wages, as we have seen. Some students of social security problems object to the payroll taxes because the incidence of these taxes is uneven. Some industries employ a larger proportion of labor in relation to their capital equipment than others, so that their payrolls constitute a larger proportion of their total costs. This means that the payroll taxes fall more heavily upon them—which, it is argued, is unfair. Not only that, but the industries in which these taxes are heaviest are likely to organize pressure groups to force the passage of laws that will reduce this burden. Notwithstanding these objections, it is the judgment of the present writers that payroll taxes are a desirable method of financing the social security program because these taxes have the effect of causing employers to include in their cost accounts a part, at least, of the social costs associated with the employment of labor in their businesses. This is in accordance with the principle explained in an earlier paragraph. Indeed, the full application of this principle suggests that most of the expense of the social security program should be financed in this way. The objection that the incidence of payroll taxes is uneven is not convincing. Just as every business must pay wages in proportion to the number of employees it hires, so should it expect to pay for its workers' risks in like proportion. There is nothing unfair about this, for the payroll taxes do not come out of the employer's personal income. They are included in his production costs, and added to the prices of his products. It is entirely proper that the price of every product should include the social costs of producing it. However, in the case of old age and sickness insurance, it is probably wise to have the individual worker contribute something out of his wages in order to encourage personal habits of thrift, and to discourage the attitude of expecting largesse from the public treasury for every contingency.

How the costs should be distributed in time is a question of whether social security benefits should be paid for out of taxes collected in the year when the payments are met, or whether reserves should be accumulated in advance for this purpose. Private insurance companies provide retirement annuities and life insurance by accumulating, during the life of the insured,

a sufficient capital sum to make the payments when they fall due. In the beginning, the federal old age annuity program contemplated a similar arrangement The wage and payroll taxes collected in the early years of the plan were expected to exceed the retirement annuities paid out. The excess was to be held by the treasury as a reserve, invested in United States government bonds, the interest on which would help later to pay the annuities It soon became apparent that these reserves would eventually amount to a staggering sum, which would create serious political and financial problems. Furthermore, the fund was quite unnecessary Unlike a private insurance company, which must have a reserve of income-yielding investments to fall back upon if current receipts of premiums are not sufficient to pay the benefits which it is obligated to make, the federal government has taxing power adequate at all times to meet insurance payments as they come due. In its case a reserve is largely a delusion, for it consists of the government's own securities, interest on which must be paid out of taxes anyway. Why then go through the fiction of taxing the people to pay interest on bonds held as insurance reserves, which interest will be paid to wage-earners for old age benefits, when the same end could be accomplished more simply and directly by taxing the people to pay those benefits in the first place?

A good deal is to be said in favor of the reserve principle in the case of unemployment insurance Payments of such insurance are likely to be greatest in times of business depression, when revenues from taxes are likely to decline. If cash reserves are accumulated during prosperity, and then paid out to wage-earners as unemployment benefits in periods of depression, they will swell the total volume of consumer expenditures during the slump, thus tending to offset the decline in demand which is a feature of the depression, and thereby lessen its severity In other words, social security collections and payments can be organized in such a way as to compensate in some degree for the alternations of ordinary expenditures by the people. This possibility will be more fully discussed in Chapters XIII and XXVI.

The original reserve provisions of the Social Security Act were modified so as to reduce the size of the reserve, so that the present program is based partly on the pay-as you-go and partly on the reserve principle. Collections and payments, however, have not yet been arranged on the compensatory principle of offsetting the alternations of private business activity.

Security vs. Initiative.—The contemporary emphasis upon social security for workers is only one phase of a more general tendency to seek protection against the risks of economic loss wherever they appear in industry. Some observers have expressed the fear that this seeking after security may kill the spirit of progress Our remarkable achievements in the field of production have been attained by initiative and enterprise on the part of bold leaders who were willing to risk their savings and their personal prospects in the adventure of developing the resources of this continent Only by such venturesome

enterprise, it is held, can our economic progress be continued. The occurrence of severe depressions, and the general economic breakdown that prevailed between the two world wars, has made our economic life so hazardous that people are losing the spirit of adventure and seeking in various ways to entrench themselves in positions of security. Monopolistic trade agreements, investment in bonds instead of in common stocks, labor's demand for a guaranteed annual wage, and the development of social insurance, are cited as illustrations of this trend.

There is some truth to these objections, but they hardly constitute a sufficient argument against the desirability of a social security program. The problem of business depressions can be dealt with if we set ourselves resolutely about it. Given suitable monetary institutions and other reforms in our economic system that will be suggested in various chapters of this book, some of the more serious hazards of industry can be reduced to reasonable proportions. There will then be scope for individual initiative to exercise itself with prospects for success in a large enough number of cases to prevent the spirit of progress from being killed. There are always some venturesome spirits who are willing to undertake risks for the sake of possible gains. A program of social insurance for the masses, to protect them against catastrophic losses arising out of economic conditions over which they have no control, need not interfere with a willingness on the part of those who have imagination and ambition to embark upon new enterprises that blaze the trail to economic progress.

Summary

Workers in industry are subject to a variety of risks which include unemployment, industrial accidents and occupational disease, premature old age, and loss of market for their skill through technological changes. The reduction of these risks requires the prevention of accidents by use of safety devices and a program of safety education, a decrease in occupational disease through more sanitary working conditions, vocational training and reeducation, and the various measures for dealing with unemployment that were discussed in the last chapter.

Further measures are needed to convert the social costs of maintaining disabled and unemployed labor into business costs. Social insurance will help to do this. National social insurance systems, which pay benefits to workers in cases of accidents, sickness, old age, and unemployment, are widespread in European countries. In this country, most states have developed systems of workmen's compensation for accidents, placing the entire burden on the employer. The Social Security Act now provides for old age pensions and annuities, and unemployment compensation for certain categories of workers, under the supervision of a Social Security Board. The old age pensions are paid by the state and federal governments. The cost of the

annuities is shared by workers and employers through payroll and wage taxes levied for the purpose Unemployment insurance is financed by a three per cent tax on payrolls. There are minor provisions for the blind, needy dependent children, public health, and vocational education.

There is need for the addition of sickness insurance to our social security system. The program also needs greater uniformity and centralization, which are difficult to attain because of the division of federal and state sovereignties. There is controversy over who should bear the burden of social insurance costs Payroll taxes are justified as a device for introducing social costs of production into business cost calculations, and wage taxes are needed to develop habits of individual thrift and responsibility. The pay-as-you-go principle of financing is better than the reserve principle for old age annuities, but the accumulation of reserves in prosperity, to be paid out in unemployment benefits in periods of depression, is a useful device to help compensate for the alternations of the business cycle. There does not seem to be much justification for the feeling that social security systems tend to dampen the spirit of initiative in economic life

REFERENCES AND SUGGESTIONS FOR FURTHER READING

An excellent presentation of the problems of social insurance and how they have been met in various countries is contained in Barbara Armstrong's *Insuring the Essentials* (1932) In his *Standards of Unemployment Insurance* (1932), Paul H Douglas presents a brief survey of that problem For an excellent analysis of the Social Security Act and consideration of the problems raised by its passage, see either Paul H Douglas, *Social Security in the United States* (1936), or Eveline M Burns, *Toward Social Security* (1936) Louis S Reed, in *Health Insurance* (1937), discusses broadly the provision of medical facilities as it is now organized, and as it might be Sir William Beveridge's report, *Social Insurance and Allied Services* (1942), presents in detail his sweeping proposals for social security in postwar Great Britain Lewis Meriam surveys existing social insurance plans in the United States, Great Britain, and New Zealand, and offers a carefully considered program for the United States, in his Brookings Institution study, *Relief and Social Security* (1946)

CHAPTER XII

Problems of Population

A. Population and the Means of Subsistence

The Economic Significance of Population Problems.—The welfare of labor and of the people as a whole is profoundly affected by both the size and composition of the population. A given geographical region can support well only a limited number of people. No matter how advanced a nation may be in its productive techniques, the average standard of living of its people will be very low if the population is too large in proportion to the natural resources upon which it can draw. The larger the area of its geographical resources, other things being equal, the higher the standard of living will be. The size of the population affects also the division of income among the suppliers of the several factors of production. Where laborers are numerous in relation to the amount of land, wages will be low and land rents will be high; where land is abundant and labor relatively scarce, labor's share of income will be greater and that of land-owners will be less. The structure of industry will be affected likewise by the same factors. A large land area and a sparse population make for extensive agriculture; they also stimulate the use of mechanical inventions and processes that will promote an economical use of labor. Conversely, a large population in relation to the land area makes for intensive agriculture and hand methods of production Some economists believe that a rapidly growing population creates a steadily expanding demand for goods that provides ample opportunities for the investment of savings and stimulates a high level of economic activity; they believe that a slow rate of population growth or a stationary population limits the opportunities for investment and causes economic stagnation and underemployment. The composition of the population gives rise to both economic and sociological problems. For example, the distribution of intelligence and skill among the people brings about differences in wages. A population of different racial composition creates problems of minority groups, superior and inferior economic status, racial discrimination, and the like. A dense population causes the development of large cities, with their problems of traffic congestion, housing, slums, the breeding of crime, and so on. A sparse population, widely scattered over a large area, creates problems of communications, transportation, and education. We cannot deal fully with all these questions in this chapter, but we can consider some of them briefly

The Malthusian Law of Population.—A most important generalization concerning the size of the population was set forth a century and a half ago by the British economist and clergyman, Thomas Malthus, in his *Essay on Population*. It was in 1809 that he laid down his now famous law of population. The law in its modern form may be stated thus: *In a given state of the arts of production, population tends to outrun subsistence.* The reasons for this are two. Man has been endowed with the instinct to increase and multiply, and the natural exercise of this impulse makes possible a very rapid increase in the numbers of mankind. On the other hand, man must live on the food products and raw materials which he can wrest from the land at his disposal. And it is an established principle of economics that, in a given state of the arts, after a certain point has been reached, increasing applications of labor to land fail to bring equal increases in product. Hence the increased labor caused by the growth of population finds itself opposed by the principle of diminishing returns, and per capita production tends to decline.

If the progress of the industrial arts is sufficiently rapid, it may overcome the tendency to diminishing returns, permitting the labor of man to yield more than enough to provide for the ever-increasing numbers. But there is always the danger, which has become a tragic reality many times in the course of the world's history, that the multiplication of human beings will take place faster than scientific discovery and inventions can make provision for it. When this occurs, there is likely to be trouble. As Malthus put it, population must then be checked by either positive or preventive means. Positive checks will take the form of increasing deaths, due to infant mortality, epidemics, wars, or other disasters, brought on by low standards of living resulting from the ruthless struggle which overcrowding causes. If population is not reduced in this way, its growth must be retarded by preventive checks which decrease the number of births—by late marriages, by immoral sexual practices, by abortions, or by deliberate control of births, all of which depend largely upon the customs relating to the family which prevail among the people concerned.

Of course, if there is available elsewhere in the world undeveloped land which might be drawn upon to provide means of subsistence for a growing people, the nation which is in a position to utilize it through colonization, emigration, or the importation of foodstuffs therefrom, may escape the effects of these checks for a time. But this solution of the problem is not always possible, and it is becoming less so for all nations as the unexploited portions of the world are being gradually peopled and developed.

Malthus was particularly pessimistic at the prospects presented by his law, and his gloomy views were not unreasonable in view of the miserable condition of the masses in England and other parts of the world at the time he wrote. Europe was then too densely populated. But it will be recalled that, in the early years of the nineteenth century, the remarkable advance

in the technique of industry, known as the Industrial Revolution, took place. It was during this period, also, that America and other undeveloped sections of the world were rapidly being opened up and colonized. The great increase in foodstuffs and raw materials placed at the disposal of European peoples by these developments offered an easy escape from the Malthusian difficulty, and income increased so much more rapidly than population that Malthus' prediction of overpopulation was not fulfilled.

In the contemporary world the situation is a mixed one which presents different problems for different regions. In many places (especially in the Orient) the pressure of population on the means of subsistence is acute, and standards of living are accordingly very low; but in some countries of the occidental world (including the United States) the birth rate is declining to such an extent that there is now the prospect of a stationary population in the relatively near future. Both conditions have important economic consequences which we must investigate.

The Growth of Population in the Past.—The increase in the numbers of mankind in the past century and a quarter is a remarkable evidence of the power of the human race to increase and multiply when it has the opportunity to do so. Prior to 1800 its growth had been comparatively slow. The world's population in that year has been estimated at less than 850 million, which is not a large number when it is considered that the human race was then some half a million years old.[1] Since 1800, however, the population has more than doubled, until at the present time there are estimated to be about two billion people in the world, a growth of over a billion in a little more than a century. Almost nowhere has the rate of this increase been greater than it was in the United States. The figures for this country are given on the opposite page. From this table it appears that, from 1800 to 1860, our numbers were increasing at an average rate of almost 35 per cent per decade—a rate sufficient to double the population in about twenty-five years.

The increase in world population was made possible by a number of things. In the first place, this was an era of rapid development in the science of agriculture. New knowledge concerning the rotation of crops, the nature of soils, fertilization, and the like, led to some increase in the amount of product obtainable from each acre under cultivation. Moreover, the technical inventions of the Industrial Revolution gave rise to a number of mechanical appliances which greatly increased the efficiency of labor in farming. Such devices as improved plows, reapers and binders, and other agricultural machinery, made it possible for one man to cultivate effectively a much larger acreage that he could before. Significant also was the fact that the opening

[1] These figures are taken from Edward M. East, *Mankind at the Cross Roads* (1923), pp. 66-77.

up of new territory in various parts of the world, and especially in the Americas, placed at the disposal of mankind an enormous increase in the land available for productive purposes. This benefited not only those nations which, like the United States, found the new territory at their very doorsteps, but it provided a means of subsistence for increasing populations in the countries of Europe whose geographic boundaries offered no possibility of expansion. The area of the British Isles could not be increased, but the British people could draw upon the vast producing areas of Canada, the United States, and Australia, by concentrating their energies on manufactured goods and exchanging them for the raw produce imported from those countries. Holland, Belgium, and other industrial nations were similarly permitted to support an exceedingly congested population by exchanging their specialties for foodstuffs from other parts of the world. There was also made possible emigration from densely populated regions to the new areas, and this took place on a large scale. These fortunate and unprecedented events offset the tendency of population to increase faster than the means of subsistence.

Year	*Millions*	*Percentage* of Increase*
1800	5.3	
1810	7.2	36
1820	9.6	33
1830	12.9	34
1840	17.1	33
1850	23 2	36
1860	31 4	36
1870	38.5	23
1880	50.1	30
1890	62.6	25
1900	75 7	21
1910	91.9	21
1920	105.7	15
1930	122.8	16
1940	131.7	7

The Present Rate of Population Increase.—Although the rate of growth in many countries has declined in recent years, the present rate of increase in the world's population is by no means slow. Prior to the First World War, the natural increase of births over deaths in such countries as Australia, Argentina, New Zealand, the United States, and some of the Canadian provinces may be described as high, ranging not far from 20 per cent per decade. In England, Germany, and the Scandinavian countries it was moderately high, ranging somewhere around 10 per cent. In some countries, such as France, China, and Mexico, the rate was relatively low, ranging not

over 5 per cent. But in no country, with the possible exception of Mexico, was there no increase at all.[2] The average annual rate of growth for twenty-six of the leading countries, during the five years from 1906 to 1911, was 11.59 per thousand. It is probably only slightly less than this at the present time. This rate is sufficient to double the population every sixty years. The rapidity of such an increase is better appreciated when we consider what the world's population would be in the course of a few decades if it continued to grow at this rate. Taking the population in 1924 to be 1,850,000,000 (which is a reasonably close estimate) the number of the world's people would reach 3,700,000,000 in the year 1984, 7,400,000,000 in 2044, and 14,800,000,000 in 2104.[3] This means that in less than two centuries, the population of the world would be multiplied more than seven-fold.

We are particularly interested in the growth of population in the United States. The figures for this country were given in a preceding paragraph. On the basis of present tendencies, it has been estimated that we can expect a population of from 140,500,000 to 145,000,000 by 1950, and from 145,000,000 to 190,000,000 in 1980.[4]

The Question at Issue: How Long Can These Rates of Increase Continue?—It is unthinkable that such rates of increase in numbers as are now taking place throughout the world can continue indefinitely. A simple calculation will prove it to be impossible. A statistician has figured that, at an increase of 1 per cent per annnum (which is slightly less than the average rate for twenty-six countries given above), the progeny of a single pair of human beings would be so numerous in ten thousand years that it would require 1,340,000,000,000,000,000,000 earths merely to furnish material for their bodies! It has been variously estimated that from three to fourteen billions is the utmost number of persons that can find subsistence on this planet.[5] It is inevitable, therefore, that at some time in the future the increase in numbers must cease. Sooner or later, the checks to population growth described by Malthus must be felt. The only question that confronts us is, When? Is the pressure of population soon to become so serious that it will present a difficult problem, or is the prospect of this situation so remote that we need give it no present concern? On this matter two contrasting points of view prevail among students of the problem—one optimistic, the other pessimistic. These two attitudes, with the reasoning advanced by those who hold them, we may now consider.

[2] The above figures are taken from W. R. Tylor "The Increase of Contemporary Peoples," in *The North American Review,* Vol 218, November, 1923, pp 607-620.

[3] The statistics are those of G. H. Knibbs, in "The World Problems of Population," *Scientia* Vol 38, October and November, 1925, pp 249-262 and 329-334.

[4] W. S. Thompson and P. K. Whelpton, "The Population of the Nation," in *Recent Social Trends in the United States,* (1933) Chap I. See also Pearl's Curve of Population Growth for the United States on page 288.

[5] G. H. Knibbs, *op. cit.*

An Optimistic View of the Possible Increase in Food Supply.—The optimists point out that there are still vast unused agricultural resources in the world. The lands of North and South America, South Africa, Australia, New Zealand, and some parts of Asia are by no means as intensively cultivated as they might be. There are also swamps which can be drained, and arid regions which can be irrigated There are tropical regions in South America and Africa, rich in fertility, which may eventually be made to yield large quantities of foodstuffs if modern sanitation makes it possible for progressive races to inhabit them permanently When we consider the high yields per acre which are produced in some parts of the world where intensive agriculture is carried on, with the low yields obtained by extensive methods in such countries as the United States, Canada, Argentina, Brazil, Siberia, and central Africa, it is apparent that there are still unused productive resources in the latter which might be made to support a much larger population. It is possible to grow two crops in a season, where only one crop is now cultivated, and there are some geographers who believe that there is a great opportunity to provide additional food by making use of tree crops notably nuts and fruits, not now resorted to. Trees can be raised on land that is not suited to other kinds of agriculture, and some of these tree products are very rich in nutritive value It has also been suggested that the sea may eventually yield new foods in large quantities in the form of mollusks, fish, and even marine plants. Then there is science to be considered. New discoveries in the way of fertilizers and agricultural methods may serve greatly to increase the yield per acre and per man from farming. Chemistry is making great strides, and some chemists hold forth the prospect that eventually they will be able to produce synthetic foods from inorganic materials. What the eventual possibilities of science in such directions may be, no man can tell.

Limits to the Food Supply.—A majority of students of the population problem are less sanguine regarding the world's prospects. They recognize that, while the land in many parts of the world is not cultivated as intensively as it can be, we must reckon with the principle of diminishing returns; and it is not to be denied that an increase in the yield per acre in countries where extensive methods are largely in use is only obtained by the application of a proportionately greater amount of labor and capital.

This means that, although aggregate yields of foodstuffs can be obtained from such sources, they will be smaller per capita, unless unforeseen inventions occur. Hence, larger numbers can be supported by more intensive agriculture only at lower standards of living. This is not a very pleasing prospect. High yield per man is much more to be desired than high yield per acre, if the latter is to be obtained only with a proportionate increase in labor. There is the possibility that science will find ways of offsetting diminishing returns, so that increasing yields per acre can be obtained without

decreasing the yield per man; but the achievements of science in the past give no assurance of this, for they have been mainly (though not wholly) of a different sort. New methods of transportation have made accessible for cultivation lands which were formerly unusable because of their distance from population centers; and mechanical inventions, such as the reaper, the threshing machine, and the tractor, have made it possible to cultivate this ever-increasing acreage with proportionately less labor than before. So, while the yield per acre has been increased to some extent by a more intensive agriculture, the presence of abundant new lands on the frontiers has enabled man to escape the declining per capita production which would have been occasioned by a more pronounced tendency in this direction.

Now this process of extending agriculture over more territory is reaching its limits. The unused parts of the world referred to in the preceding paragraph are not, for the most part, as fertile as those already put to the plow In the United States, for instance, only the poorest regions remain uncultivated. Professor East[6] has calculated that only about 40 per cent of the land area of the globe is arable, and that at the level of efficiency prevailing in the agriculture of western Europe during periods of peace (which is somewhat better than the average for the world at large), 2.5 acres of land are necessary to support one person at a standard of living equal to that which is found in the more densely populated countries of Europe. It is to be observed that this is a standard of living considerably lower than that which prevails in the United States today From these figures he computes that the entire world is capable of supporting a maximum population of 5,200,000,000. At the present rate of increase this figure would be reached in a little more than a century. It would be wise, therefore, to proceed with caution in formulating a world population policy.

The Supply of Other Resources.—This cautious attitude is supported by the prospects for materials other than foodstuffs required by the world's people. Such agricultural materials, for instance, as cotton and wool, present a problem not unlike that of food The increasing use of synthetic fibers, such as rayon and nylon, may relieve the pressure here The rapid depletion of forests is another factor to be reckoned with, and one not likely to be solved so easily

More serious is the situation with regard to mineral products, especially coal and oil. Its significance for the population problem is plain. Modern civilization is based upon fuel for power, and metals, especially iron, for the construction of buildings, machinery, and industrial equipment of all kinds Unlike agricultural products, these raw materials cannot be reproduced once they have been used, and the supply of them is definitely limited by the deposits which nature has placed in the earth. There is no imminent danger

[6] Edward M East, *op cit*, pp 69 ff

of exhausting the deposits of minerals for several hundred years at least—that is, known deposits of coal, iron, and oil will not be entirely used up within that time; but man is faced with the fact that the best sources of supply of these minerals are rapidly being exhausted, so that he is forced to make greater exertions to obtain them. Terrific inroads upon deposits of copper and other minerals were made during the Second World War. Mineral products are being extracted from the soil at a rate much faster than the growth of population. This means that we are gradually passing from the richest deposits of coal, copper, iron, oil, and other minerals to those which are poorer or less accessible. We are confronted by the immediate prospect of decreasing yields per unit of labor and equipment in most of our mineral production. So far as fuel is concerned, atomic energy may solve the problem, and there may be other helpful developments, but in the meantime caution bids us go slowly.

Overpopulation.—There are many parts of the world where an acute condition of overpopulation now prevails. India, China, and Japan are conspicuous examples. Our own island of Puerto Rico is one of the most densely populated areas in the world, having 544 persons to the square mile on an island most of which is mountainous and unsuited to agriculture. This compares with a density of only 47 persons per square mile for the continental United States. In all of these heavily populated countries the misery and the positive checks described by Malthus are painfully active. Standards of living are extremely low, the rate of infant mortality is very high, disease and pestilence are widespread, and famines which decimate the population are not uncommon. In some countries of western Europe the density of population is high, but these countries have been able to escape some of the more serious consequences of overpopulation by concentrating upon manufactured goods, which they trade for the foodstuffs and agricultural raw materials of other countries. England, Holland, and Belgium are in this position. As the industrialization of other parts of the world progresses, the market for the manufactured goods of these countries may become narrower, and they may find it increasingly difficult to support their people. There is reason to believe that England already may be overpopulated; it has been purchasing agricultural produce from other parts of the world on increasingly unfavorable terms in recent decades. Italy has been overpopulated for a long time, but the pressure has been relieved somewhat by emigration, and the condition has not been quite as serious as in the countries of Asia. The pressure of population growth in Germany, Italy, and Japan has been partly, though not wholly, responsible for military aggression by these peoples.

These overpopulated regions of the world can meet their problem partly by adopting better methods of agriculture which will enable their lands to support their numbers at higher standards of living However, this gain can easily be wiped out by a further increase in the numbers of the people.

In the long run, the only solution to their problem is for the growth of population to be checked by preventive means along the lines suggested below.

The Optimum Population.—In any given state of the arts, there is a certain number of people whose labor will produce the largest possible per capita product from a given territory. A population of this most effective size is called the *optimum* population. If there are too few people spread thinly over a given area, they cannot develop their industries effectively. Up to a certain point, the growth of population promotes increased efficiency of production by making possible a greater degree of division of labor, the economies of large-scale methods in manufactures, and the more thorough cultivation of the soil. It also facilitates improved means of transportation, which make accessible productive resources that otherwise would have to go unutilized; and the rise of cities and towns brings into being those social pleasures and comfortable facilities which go to make up modern civilization. It would be impossible to carry on a large part of modern industry as it is now done without a considerable density of population. To some extent these advantages may outweigh the disadvantage of the increasing cost of food. It may be worth while to give up a larger portion of our income for foodstuffs for the sake of obtaining motion pictures, travel, radios, libraries, better clothing, more luxurious homes, and so on. These things would not be possible without a considerable density of population. When increasing density has passed a certain point, however, pressure upon the means of subsistence becomes so great that it cannot be compensated by these luxuries. Then the evils of overpopulation, leading, as they must, to lower standards of living, begin to be felt. This optimum point marks the danger line in the growth of population. It should be the goal of national policy to maintain its numbers at the point of maximum per capita production, and not to permit it to go beyond this. What the optimum number is will depend upon the natural resources at the disposal of the people, the productive technique which prevails among them, and the effectiveness of their economic organization. It is a matter of finding and maintaining just the right ratio between population and resources in the prevailing state of the industrial arts.

The data are not yet available to indicate what is the optimum population for the United States at the present time, but there is some reason to believe that we may already have passed it. We appear to have pushed the intensiveness of cultivation of our best lands and the utilization of our poorer lands so far that the per capita return in agriculture is now declining. East adduces evidence to show that the amount of labor and capital equipment employed per acre in the agriculture of the United States is increasing at a rate somewhat faster than the product obtained. He believes that a decline has set in which had its beginning about the year 1900. This view is shared by other writers.

The Limitation of Births.—The reasoning of the foregoing paragraphs leads to the conclusion that the time has come when the peoples of the world should seek consciously to check the present rapid rate of increase in their numbers, if economic welfare is to be maintained. Many persons, particularly among the more well-to-do, are already limiting the size of their families. Among the masses of the people, however, the rate of increase is still threateningly large. It appears that few parents really desire a large family of children, and that were it not for ignorance, they would restrict their numbers. Conventional taboos and prejudices in matters of sex, however, present a most difficult obstacle to the education of the people in such matters. The so-called birth control movement is an organized propaganda designed to break down this prejudice, and to bring about the repeal of the laws, now in effect in the United States and elsewhere, which prevent the dissemination of information concerning methods of limiting births. There is much to be said in favor of the establishment of clinics where parents can be given this information. Such clinics have been publicly supported in some countries, notably Holland, and within the last few years a few of them have been opened in cities of the United States by private organizations, but their activities have been greatly restricted by hampering laws. An intelligent people can hardly continue complacently permitting the growth of population to go on without control of any kind. A few children in each family, reared at the high standards of living which small numbers permit, cannot fail to produce a nation of better men and women than can be expected from a numerous progeny brought up in poverty and squalor. The limitation of birth is essential to maximum per capita prosperity.

The Restriction of Immigration.—Throughout history the migration of peoples has been a means of relief from the pressure of population upon its means of subsistence. So long as there were unsettled areas into which surplus populations could flow, this was a good solution to the problem. With the world's virgin territories rapidly filling up, however, it no longer offers a satisfactory outlet for population growth; and, so long as it is relied upon, it can only lead to conflict among the nations struggling to find such outlets. Eventually it brings about overpopulation in the very regions to which the emigrants go. At best, it affords but temporary relief; at its worst it is the cause of warfare and disaster.

This aspect of the population problem is of particular significance to the United States, because we have long been the melting pot into which was poured the overflow from the densely populated countries of Europe and Asia. So long as our numbers were few in relation to our resources, the annual influx of these immigrants was perhaps an advantage in that it helped us to attain to the optimum number, but now that we have passed this desirable point it is no longer to our advantage. Nor is it, in the long run, of advantage to the nations from which the emigrants are sent, for

their departure merely permits a more rapid growth of numbers in the home country, and the gaps created are filled up as fast as they appear. There is little reason to believe that emigration in recent times has served seriously to check the increase of population in the countries of Europe and Asia Therefore, a policy of restricted immigration on the part of the United States is altogether justifiable.

The United States has wisely adopted a policy of curtailing the numbers of its immigrants. By the Immigration Act of 1924, which followed a number of previous restrictive laws, the number of immigrants annually admitted to this country is limited to 3 per cent of the numbers of that nationality who were living here, according to the census of 1890. This law has been so administered that only about 150,000 persons or less are now admissible annually to our shores. When it is considered that, prior to the First World War, immigrants were coming to our shores at the rate of more than a million a year, it will be seen that this is a very drastic reduction. The census of 1890 was chosen as the basis for this allotment, rather than more recent censuses, because it would keep out a larger number of the immigrants from southeastern Europe and Asia, who were considered by Congress to be less desirable than immigrants from the countries of northwestern Europe Although the method of restriction embodied in this legislation can be criticized, the fact of restriction itself marks an important step in the right direction, and is altogether to be desired. Future legislation should be shaped, not with the view to admitting more immigrants, but to selecting them on a more rational basis of health and intelligence

The Declining Birth Rate.—Within recent years the rate of population increase among the more progressive peoples has been declining. A reference to the figures given above for this country indicates that our rate of increase, including immigration, has been declining steadily ever since 1880 This is fairly typical of conditions in other parts of the occidental world, except that in the older countries the decline set in earlier than here. This decrease in the rate of growth is not the result of a higher death rate, for modern methods of sanitation and the treatment of disease have greatly reduced the number of deaths and have lengthened the average life of human beings This factor, therefore, would tend to cause an increase, rather than a decrease, in the growth of population What has happened is that the birth rate has been decreasing throughout the countries of America and western Europe.

That this tendency is likely to go further is indicated by the researches of a student of population trends.[7] He has shown that the growth of population cannot be predicted by a simple comparison of birth and death rates. Population can maintain itself only if the women of child-bearing age give

[7] R R Kuczynski *The Balance of Births and Deaths* (1928)

birth to enough girls to replace them If the number of potential future mothers is not sufficient to replace those passing out of the child-bearing period, population must decline, unless each woman gives birth to more children than before By studying these factors in the populations of Western and Northern Europe, he came to the conclusion that population trends in those countries have already passed the critical point. "According to the fertility and mortality in Western and Northern Europe in 1926, 100 mothers give birth to 93 future mothers only With the fertility of 1926 the population is bound to die out unless the mortality of potential mothers decreases beyond reasonable expectations And fertility continued its downward path in 1927."[8] "With fertility and mortality as they prevail at present, the population of some smaller countries still shows a genuine growth, but the population of the larger countries—France, and especially England and Germany—is doomed to die out"[9] Other investigators have come to similar conclusions

The decline does not appear to be due to any reduction in the fertility of human beings, although this has been suggested by some ill-informed writers as a possible explanation. There is no evidence to show that the capacity of men and women to procreate and bear children has been appreciably reduced by the trend of biologic evolution. Nor is there any statistical evidence that marriages are being postponed to such a late age in life that children are less likely to result What is happening is that the birth of children in modern families is no longer being left to the blind forces of nature, but is being deliberately controlled Large families are not compatible with the maintenance of high standards of living, for the expense of bringing into the world, rearing, and educating a large number of children is more than the average purse can stand Therefore, parents prefer fewer children brought up with the extra care and at the higher level of comfort which the small family makes possible.

It seems probable that this tendency to smaller families is a direct result of the pressure of population upon the means of subsistence. If it were possible to raise large families without jeopardy to the comforts which western peoples have come to expect, it is reasonable to assume that there would be less restriction of births The limitation of offspring, therefore, is apparently a confirmation of the Malthusian doctrine. It is one of the preventive checks to population in actual operation—but a check of a very different sort from that which was anticipated by the author of the famous essay

The Rhythm of Population Growth.—An American biologist, Raymond Pearl, made some interesting laboratory experiments and statistical studies of the growth of populations, which led him to believe that the growth of

[8] *Ibid*, p 54
[9] *Ibid*, p 4

numbers among all living organisms, including man, is subject to the same law. His experiments on yeast and fruit flies indicated that, if these vegetable and animal organisms are placed in an environment where the food supply is limited, at first they multiply rapidly, until pressure upon the means of subsistence begins to be felt, and then the rate of growth falls off. If this rate of increase is plotted on a graph, it gives a curve which always has the same general shape. Similar curves can be drawn for human populations. Such a curve for the United States is given in Figure 5.[10] It is to be observed that the curve rises slowly at first, then increases during the

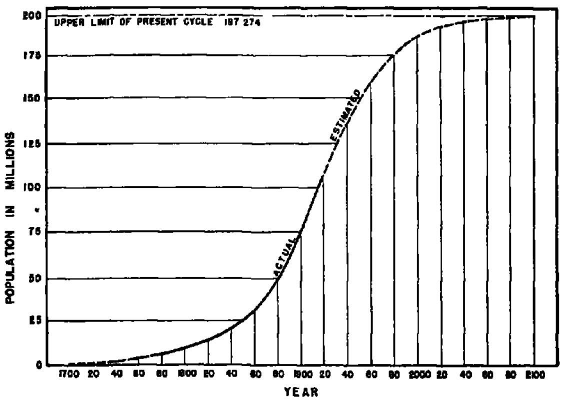

FIGURE 5 Pearl's Curve of Population Growth for the United States.

early stages, when food is abundant in relation to numbers, until it reaches a maximum, after which the pressure of population begins to be felt and the rate of increase declines to its upper limit. Professor Pearl's researches indicate that such a curve can be drawn for any statistics of population growth which can be found either among vegetable organisms, animal organisms, or human peoples Of course the exact rates of growth will not be identical in all these cases, but the general shape of the curve will be the same.

It is possible that, after a population has reached the upper limit of its growth under the conditions of environment hitherto prevailing, a change rendering the environment more favorable may take place, releasing the pressure and allowing the numbers to increase as before. The curve will then shoot upward again until it reaches a second limit similar to the first. Something like this undoubtedly happened to the human race in that era

[10] Raymond Pearl *The Biology of Population Growth* (1925), p 14

of unprecedented development which accompanied the colonization of the New World and the occurrence of the Industrial Revolution The sociologist Giddings [11] some decades ago suggested that there is a rhythm in the race between population and progress "A general advance in material well-being and a gradual elevation of the standard of living, then a growth of population until it becomes increasingly difficult to raise the plane of living, then another era of economic progress—this rhythm seems to be the form of the demogenic process" If this law be true, it is possible that we are reaching the close of an era of progress, and that the immediate prospect is for population pressure, before another advance in the arts and science paves the way for a new upward movement This may be the reason for the declining birth rate and for the unfavorable outlook for food resources now claiming the attention of students of population.

Economic Consequences of the Declining Rate of Growth.—From the researches of Pearl and various other investigators, it appears that population growth in the United States is now reaching its upper limit (for the present cycle, at least), so that we may expect our numbers to become stationary in the latter part of the present century. The same prospect faces a number of other countries, especially in western Europe This outlook is held, by economists who follow the pessimistic views of Keynes and Hansen, to be one of the factors that threatens to keep us in a state of economic stagnation and underemployment They believe that the rapid growth of population has caused a steady expansion of the demand for goods which has provided an opportunity for the profitable investment of a growing volume of savings. With population no longer increasing, they fear that the opportunities for investment will decline, with resultant depressing effects upon the economy. The present writers cannot share this pessimism While it is true that new people born into the world bring new mouths to be fed, new bodies to be clothed, and new families to be housed, it is also true that they bring new laborers to be employed and, presumably, new savings to be invested The one offsets the other Therefore, when the rate of population growth slows up, the decline in the number of people to buy goods will be compensated by a corresponding decline in the numbers to be employed in supplying them Furthermore, as Silberling points out,[12] the rate of increase in our population has been slowing down progressively ever since the Civil War, yet the rate of production growth during this period has not decreased, therefore, there does not seem to be any reason to suppose that the decline in population growth holds any threat of depressing the economy.

There are other problems, however, which do arise out of our changing population prospect A decline in the rate of growth (especially when coupled with the increased longevity which modern medicine is bringing

[11] F H Giddings, *Principles of Sociology* (1896) p 335

[12] Norman J Silberling, *The Dynamics of Business* (1943), pp 653 654

about) causes a significant change in the age distribution of the people. It causes a larger proportion of elderly people in the population and a smaller proportion of those who are young. This means that an increasing burden of supporting the aged will be thrown on the shoulders of those who are of working age. Old age pensions and annuities will command a larger share of the national income. The declining proportion of young people is likely to be felt in our schools and colleges. We may presently find ourselves oversupplied with educational facilities, and may have to reshape our educational program accordingly. Private schools and colleges, in particular, may be seriously affected by a declining demand for their services. On the other hand, this may be offset by a tendency on the part of the American public to provide higher education for a larger percentage of the people than hitherto.

More serious than any of these problems is the danger that international tensions will be increased by differences in rates of population growth among different peoples. The more prolific peoples, feeling the pressure of over population, may seek an outlet for their surplus numbers by encroaching on those which are not multiplying so rapidly. The potentialities, for instance, of a populous Soviet Union overrunning the countries of western Europe, where tendencies toward stationary population are evident, are ominous. Nations whose people prefer small numbers with high standards of living may not be able to provide man-power enough to stem the onslaught of those who insist upon growing at their expense. This prospect enhances the need for a world organization that would check aggression and preserve the peace of the world. The solution for the prolific peoples should not be political expansion at the expense of their neighbors, but maintenance of the optimum population within their own borders.

B The Quality of the Population

The Differential Birth Rate.—In the vegetable and animal worlds, nature sees to it that the biological stock is kept strong and effective, in relation to its environment, by a bitter struggle for existence in which only the fittest survive. The comforts of civilization, however, have relieved man to some extent from the operation of this process of natural selection. While some of it still goes on (as when the ravages of certain diseases eventually build up an immunized stock) there is evidence that many of the features of our civilization are actually tending to preserve the weak and inefficient. Wars, for instance, kill off our most vigorous men. Medicine preserves many weak individuals who would perish in a more rigorous existence, and the ideals of celibacy cultivated by certain religious orders tend to prevent reproduction of some of the most intelligent members of society.

One of the most alarming aspects of this problem is to be found in the

so-called differential birth rate. Attention has been called to the fact that the birth rate in this country and elsewhere has been declining. Unfortunately, this decline is most evident among the more educated and well-to-do families of society. Studies of the graduates of a number of the leading American colleges, for instance, indicate that they do not have enough children to reproduce themselves. The deaths exceed the births. Similarly, the native white population of this country, particularly in New England, is reproducing itself very slowly. At the other end of the economic and social ladder, the birth rate is high. Here large families are the rule. Worst of all, among the feeble-minded reproduction goes on at an alarming rate. The morals of these people are very loose, and almost every feeble-minded woman gives birth to a large progeny of feeble-minded children, both in and out of wedlock. One hesitates to say that native born whites and college graduates represent the better biological stocks and that the poorer families are inferior, but there is some reason for assuming that, in general, those who have attained economic and cultural success are endowed with superior capacity, especially in view of the evidence regarding hereditary genius. If such is the case, then society is breeding from the bottom, and this fact is cause for considerable apprehension for the future. Here is a qualitative population problem.

Racial Factors in Population Growth.—The world is peopled with a number of different races having different hereditary characteristics. There is more or less rivalry between the races for economic and political suremacy. In the United States we have a number of races, especially whites and Negroes, living side by side in a common civilization. Some people see in this a serious biological problem. They fear that the rapid increase of Negro, Mongolian, and other colored stocks will eventually threaten the supremacy of the whites and cause a deterioration in the quality of our people. It is believed by many that the colored races are innately inferior in mental capacity to the white race. Anthropologists, however, do not share these fears. Science has not yet developed any standards of racial superiority or inferiority that can be relied upon. Intelligence tests usually show that Negroes do not make as good a showing psychologically as white men, but it is by no means certain that these tests are any true measure of innate capacity. Differences in the traditions and culture of the two races affect the results in such a way as to obscure biological factors Also there are marked differences in their opportunities We do not generally throw open to our Negroes the same opportunities that are available to whites The question of racial differences and their effects upon the quality of the people, therefore, must be set down as an unsettled problem What is probable, however, is that if we were to draw two curves indicating the intelligence of two different races, such as the whites and Negroes, they would overlap, some members of both races rating very high and some members of both races rating very low. There

would be some differences in the proportions, to be sure, but not of so marked a sort that we can designate any one race *in its entirety* as inferior to any other race. If this be the case, what we have to fear from racial factors in population growth is not so much the development of one race at a faster rate than another, but the increase of the weak individuals in both races. It is an individual problem.

One hopeful approach toward the problem of race relations is through the economic advancement of those groups which now have an inferior status. At present it is difficult for the Negroes, especially, to improve their station in life because they are denied educational opportunities and because it is hard for them to find employment in skilled work even when they are qualified for it. Some labor unions will not receive Negoes into their memberships, and many employers will not put Negroes into skilled jobs, often because white workers are unwilling to tolerate their presence in such work In 1945 the employees of the Philadelphia Transportation Company went on strike to prevent the promotion of Negro employees to street-car motormen and conductors. This is fairly typical of an attitude that is widespread.

During the Second World War a Fair Employment Practices Committee was created by executive order of the President, acting under his war time powers. This committee was charged with the duty of overcoming discrimination against Negro and other minority groups in industry Although its authority was limited, it was able (with executive support) to prevent discrimination among employees in enterprises that had war contracts with the government or that were engaged in war production. It has been proposed that a permanent committee of this sort should be created by act of Congress to prevent discrimination henceforth in all enterprises subject to the jurisdiction of the federal government, but such action has so far been prevented by the filibustering tactics of southern members of Congress When the doors of industry and education are thrown fully open to minority national groups, it is to be expected that considerable numbers of these groups will attain to higher standards of living Presumably they will then command more respect in their communities, and the feelings of prejudice, which are based in part on the belief that these races are inferior, will be reduced

Eugenics.—This brief outline of the qualitative population problem shows that society faces a danger from failure to control its heredity intelligently We can, however, control our own destiny in this respect. It is not impossible to direct the processes of reproduction so as to bring out the best hereditary qualities that we have Such scientific control of human breeding is known as *eugenics*. It is not supposed that we can now mate men and women in the cold blooded manner of the stock breeder, but it is possible to influence marriage customs, directly or indirectly, in such a way as to prevent the reproduction of our most defective stocks and to encourage it among those of better quality. There are, accordingly, two lines of eugenic endeavor.

One, known as *negative eugenics,* would prevent the increase in numbers among those classes of the population that are clearly defective. Mental defectives should either be incarcerated in institutions where the sexes can be permanently separated or, if allowed to remain at large, they should be prevented by sterilization from reproducing their kind Such a program, if rigorously carried out, would practically rid us of these classes in a few generations. The obstacles to its fulfillment are three. In the first place, people hesitate to put into the hands of any human beings the power that the administration of such laws would entail, especially in view of the fact that scientists are not yet always certain as to just what constitutes a hereditary defect. Secondly, the expense of maintaining in institutions the thousands of feeble-minded and other defectives is very great. Finally, there is that repugnance and prejudice against any interference with sexual relationships that is deeply ingrained in the popular mind. Notwithstanding these difficulties, laws providing for the sterilization of certain criminals and defectives have been passed in many of our states, and although they have not always been seriously enforced, some thousands of persons have already been sterilized.

Positive eugenics aims to promote the reproduction of our best stocks. A program of positive eugenics is much more difficult to carry out than one of negative eugenics, for it has been truly said that "love is blind," and it is very difficult to dictate to youth in the selection of a mate. Nevertheless, society has set up certain conventions and standards which do influence marriage. People do not often wed outside of their social class. Catholics are seldom mated with Protestants, nor Jews with Gentiles. Similar taboos are fairly effective as between markedly different races. If such conventions can be established and maintained on social, religious or racial lines, it is not unthinkable that we may build up similar conventions on biological lines. Education regarding the importance of hereditary soundness as a prerequisite for parenthood may in time succeed in introducing a considerable measure of eugenic choice into matrimony.

SUMMARY

The size and composition of the population gives rise to a number of economic and sociological problems. According to the Malthusian law, in a given state of the arts, population tends to outrun subsistence. Unless progress in the arts keeps pace with population growth, preventive or positive checks must take effect Rapid growth of population in the nineteenth century was made possible by improved methods of agriculture and the discovery and colonization of enormous new territories. Although the rate of growth is now declining in some countries, the world's population is still increasing fast enough to double itself in sixty years. Optimists see the

possibility of providing subsistence to maintain this rate of growth by means of more intensive cultivation, the development of inadequately exploited territories, and new methods and new crops in agriculture. However, there are limits to the food supply and other resources, and statistics demonstrate that it is physically impossible for population to go on increasing indefinitely. Serious overpopulation already exists in parts of Asia and to some extent even in western Europe.

There is an optimum population, which in a given state of the arts will yield maximum per capita production A wise population policy would be to seek and maintain this optimum by the limitation of births and the restriction of immigration. The birth rate is already declining in the United States and other occidental countries, largely because of the practice of birth control. Population tends to grow rhythmically, increasing rapidly in the early stages of exploiting a new environment, slowing up when the pressure upon resources is felt It is now slowing up in the United States, so that our population is likely to become stationary toward the close of this century Economists of the Keynes Hansen school see in this a threat of economic stagnation; others hold a more optimistic view It is likely to lead to an increasing burden of old age dependency, and it may adversely affect schools More serious is the danger that prolific peoples will overrun those whose numbers tend to become stationary

The rate of reproduction among the lower classes exceeds that among the upper classes, which may mean that we are breeding our poorest hereditary qualities The presence of different racial groups in the population creates economic and social problems One way to lessen the tension is to provide full educational and employment opportunities for Negro and other colored races The creation of a permanent Fair Employment Practices Committee would help here The biological quality of the population can be improved by negative and positive eugenics.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

General treatises on the population problem include Warren S Thompson's *Population Problems* (third edition 1942), Paul H Landis' *Population Problems, A Cultural Interpretation* (1943), and Henry P Fairchild s *People The Quantity and Quality of Population* (1939) Two excellent brief surveys are Harold Wright s *Population* (1923), and A M Carr Saunders' *Population* (1925)

For a full discussion of the biological factors in population growth, and of the optimum population, see A M Carr Saunders' *The Population Problem* (1922) R Mukerjee gives a broad interpretation of the optimum in its ecological, economic, social, and military aspects in his *The Political Economy of Population* (London, 1942)

On the declining rate of population growth and its significance, the following may be consulted R R Kuczynski's statistical study, *The Balance of Births and Deaths* (1928), and his *Population Movements* (1936), A M Carr Saunders

War Population (1936); and Gunnar Myrdal's *Population, A Problem For Democracy* (1940).

Raymond Pearl's *The Biology of Population Growth* (1925) sums up his experimental studies. His conclusions have been severely criticized.

The pessimistic point of view concerning the possibilities for further population growth is very ably set forth by Edward M. East in his *Mankind At The Crossroads* (1923). Similar views are expressed by F. A. Pearson and F. A. Harper in *The World's Hunger* (1946). A more optimistic note is struck by J. Russell Smith in his *The World's Food Resources* (1919).

PART IV

PROMOTING A BALANCED ECONOMY

CHAPTER XIII

Economic Fluctuations

A. The Nature of the Fluctuations

The Pervasive Effects of Business Irregularity.—In the chapter dealing with unemployment, and elsewhere, we have already had occasion to observe that the course of business activity in the capitalistic world, instead of progressing steadily upward, is subject to alternations of prosperity and depression. These movements are far-reaching in their influence. They affect not only production, prices, and trade, but extend into the lives of the people, through their effects upon wages and employment. It seems that they cause the whole life of man to pulsate in a social rhythm of ascent and decline. Even such apparently unrelated things as the prevalence of crime, the rate of marriage, and the number of births and deaths, are markedly affected by them.

Indexes of Business Activity.—Statisticians have worked out techniques by which the irregular course of business can be measured with a fair degree of accuracy. The fluctuations show themselves in many fields, so that by gathering data indicative of activity in these fields a very good view of their development can be obtained. Among the indexes used for this purpose are statistics of production, especially those showing the output of pig iron, coal, and other fundamental raw materials The production of basic manufactured goods, such as iron and steel products, textiles, food products, and the volume of building and other construction, are also used Since prices move upwards and downwards with the general alternations of business, index numbers of the price level are likewise helpful. The banks are even more responsive to the general movement; consequently, statistics of bank deposits, reserves, loans, and discounts, are widely used. The best index would be one showing fluctuations in the volume of trade; that is, the actual transactions of buying and selling that take place in the business world. This is not easy to measure, but it is rather clearly reflected in such items as checks cleared through the banks, the shipment of goods over railways and other common carriers, and the volume of wholesale and retail sales of merchandise. Still other data which can be employed are wages, interest rates, unemployment, and business profits

An Index of Business Activity For the United States.—In Figure 6 there is shown in graphic form an index of business activity in the United States

from 1700 to 1940. This index was built up by the painstaking work of Silberling, an American economist and statistician. By splicing together several series of figures taken from different sources, he was able to construct a continuous index covering a period of nearly two and a half centuries. The figures prior to the Civil War are based on records of imports and exports

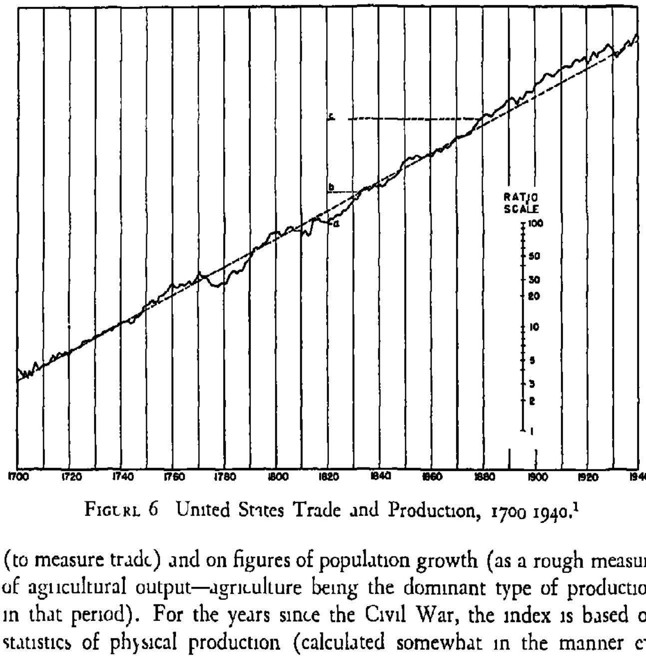

FIGURE 6 United States Trade and Production, 1700 1940.[1]

(to measure trade) and on figures of population growth (as a rough measure of agricultural output—agriculture being the dominant type of production in that period). For the years since the Civil War, the index is based on statistics of physical production (calculated somewhat in the manner explained in Chapter I). The curve is plotted on a logarithmic scale, so that vertical distances on the chart represent percentages, or multiples, of change, instead of absolute amounts of production. The rate of change in any given case can be computed by use of the ratio scale in the lower right-hand corner of the drawing For instance, the rise in the curve from point *a* to point *b* in the diagram corresponds to the distance from 1 to 2 on the scale; therefore, it indicates a doubling of output in the period from 1820 to about 1833. The increase from *a* to *c* is equal to the distance from 1 to 10 on the scale, indicating that production increased tenfold from 1820 to 1880. By applying the same scale to any other points on the diagram, the percentage change can be known in each case.

Only in the last few decades have governments and research bodies been

[1] Adapted from a similar chart on p 29 of Norman J Silberling's *The Dynamics of Business* (copyright 1943), with permission of the publishers, McGraw Hill Book Company Inc

accumulating accurate statistical data. Prior to that, one must depend upon fragmentary records; therefore, the series in the earlier years covered by this chart cannot be considered mathematically exact. Nevertheless the curve gives a rough picture that is useful for general purposes. The accuracy of the data is much better for the period since the Civil War.

Four Types of Economic Change.—Several types of change in the movement of business can be observed in the above chart. First of all, there is noticeable a marked upward slope, which is shown by the slanting dotted line drawn through the irregular curve. This general movement, persisting over a long period of years, is called the *secular trend.* In progressive economies it is usually upward, but in those which are stagnant or declining, the line would be horizontal or sloping downward. In this country, the productive progress has been so rapid that the ascent of the curve is quite marked. The average annual rate of increase was 3 per cent prior to 1750, after which it rose slowly to 3.8 per cent in the decades immediately following the Civil War, until 1890, when it declined slightly to 3.5 per cent, which was thereafter sustained. This corroborates the observation which we made in Chapter I concerning the phenomenal increase of production that has taken place in this country.

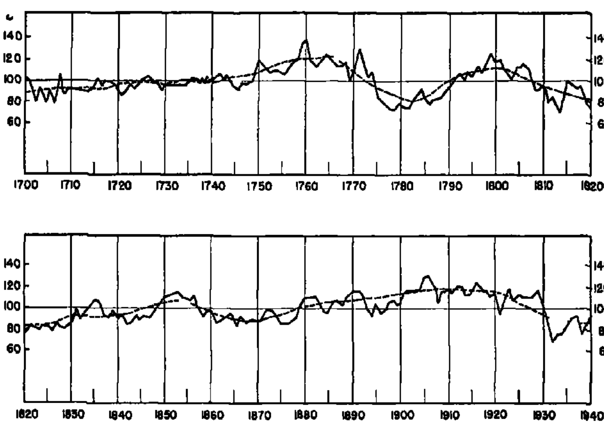

FIGURE 7. Long Waves and Short Cycles in the American Economy[2]

Looking now at the irregular, jagged curve (which shows the actual movement of business activity), it will be noticed that this fluctuates above and below the secular trend line. In order that we can see this movement more clearly, the curve is replotted in Figure 7, with the line of secular trend now shifted into the horizontal position marked 100 on the chart. This chart

[2] Adapted from Silberling, *op. cit.*, pp. 48–51, with the same permission.

makes it clear that the jagged line of actual business conditions oscillates about the general trend in long waves, which are shown by the smooth dotted curve. These we may call *long waves,* or *intermediate trends,* of business activity. This chart is plotted on an arithmetic scale, the numbers at the two sides indicating the percentage of normal (i.e., percentage of the secular trend) attained by production and trade in any given case. Observe that there is a long wave starting at a low point of about 90 in 1700, reaching a crest of somewhat above 120 in 1765, and falling to another low point about 1782. This is followed by another wave from 1782 to 1820, another from 1820 to 1870, and a fourth one, which reached its nadir about 1935 Since there were thus four long waves in a period of 240 years, it appears that these intermediate trends average about sixty years in length. Because statistical data reaching far back in time are not very reliable, there is some controversy over the existence of these long waves. Nevertheless, a number of other workers, both in this country and in Europe, using other data, have been impressed with the existence of similar movements. It seems probable therefore, that business activity does behave in this manner.

Looking once more at Figure 7, a third type of fluctuation is clearly evident. The jagged line moves upward and downward about the long waves, rising and falling above and below them. These short fluctuations are known as *business cycles* (often called trade cycles by English writers) They are so called because they constitute a series of repeated sequences, just as a wheel goes round and round. A study of the chart will show that there are usually some two or three of these cycles in every decade. Their average length in this country has been calculated at slightly less than four years.

In order that we may see the short cycles in greater detail, another chart is given in Figure 8, showing on a larger scale the movement of industrial production in this country for 1919 to 1946, and a part of 1947. This chart will also serve to bring our picture of business fluctuations down to a more recent date. Silberling's series does not go beyond 1940, because of his death in 1942. In this last chart, five complete cycles can be observed, their peaks being indicated by the letters *b, d, f,* etc., and their low points by the letters *a, c, e,* and so on. Each complete movement, like the one from *a* to *c,* or from *b* to *d,* constitutes one cycle.

There are also some lesser economic fluctuations, known as *seasonal variations* and *random movements,* that are caused by the influence of seasonal changes on the volume of business each year, and by such sporadic occurrences as strikes or the vicissitudes of the weather. They are not shown in the charts because they have been deliberately removed in order to make the other waves stand out more clearly.

From this analysis it appears that there are four types of more or less regular economic movements, namely, the secular trend, long waves (or

intermediate trends), short cycles, and seasonal variations. The secular trend movement does not constitute a serious economic problem so long as it continues an upward course. If the rate of rise were to slacken greatly, or if it were to turn downward, this would be an indication that progress was no longer being maintained, and some kind of remedial action would then be called for. The seasonal and random variations are relatively unimportant. Since the seasons recur with considerable regularity and are known in advance, business firms can make plans to deal with them ahead of time, so that they need not disturb the economy very much. They do cause some unemployment, but this has already been discussed in an earlier chapter. It is with the long waves and the short cycles that we are here concerned. They represent serious disturbances and interruptions to the smooth functioning of the economic process, and their consequences are often disastrous. We must, therefore, examine them more carefully.

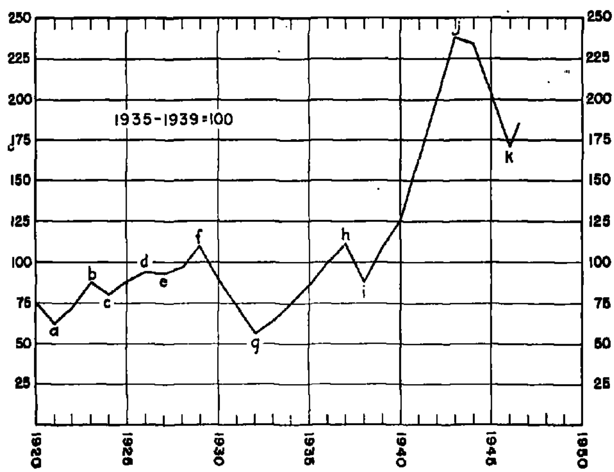

FIGURE 8. An Index of Industrial Production in the United States Since 1920.[3]

Phases of the Short Cycles.—Looking at the short cycles as they are represented in Figure 8, it can be seen that each cycle consists of two movements and has two turning points. The upturn follows a period of decline, and thus represents the beginning of a recovery, which gradually quickens its pace until it develops into a condition of prosperity. This eventually reaches a limit, whereupon there ensues a downturn, which culminates in a

[3] Based upon the index of industrial production published currently in the Federal Reserve Bulletin.

depression. Some writers distinguish four phases in each cycle. They call these phases *recovery, prosperity, recession,* and *depression.* However, recovery and prosperity are merely two different stages of one upward movement, while recession and depression represent a continuous downward movement. The two turning points which represent the crests and troughs of the cyclical waves are especially important because we can see in them the culmination of certain pent-up forces which now become strong enough to reverse the pre-existing movement and start it in the opposite direction. The economic process thus goes through a series of convulsions, instead of moving smoothly along on an even course. The point of downturn is usually called a *crisis.* The point of upturn has no specific name, but is included in the general meaning of the word recovery, or revival.

The period of prosperity is one of relatively active business. Productive capacity is more or less fully utilized, and there is not very much unemployment. Prices and wages are high. After a time this wave of prosperity is checked and a recession occurs. If mild, this may be merely a moderate decline in production, prices, and employment; but frequently it assumes a serious aspect, more properly designated as a crisis. Then a strain in the loan market becomes manifest; there is a loss of confidence in credit, and businessmen are forced to liquidate—that is, to sell their assets for cash and pay off their debts. If the strain is too great, credit may collapse, and then we have an actual panic. After crisis, depression sets in. Now business is at its lowest ebb. The demand for goods appears to have shrunk, prices sink to low levels, and the volume of production is considerably below normal capacity. Factories are closed or on part time, and thousands or even millions of workingmen are unemployed. This stagnation lasts for a considerable time; then business begins slowly to revive. Production increases and prices rise. The increase of activity spreads gradually until a period of prosperity has again been reached. The cycle then repeats itself. No two cycles are exactly alike. They differ in duration, in intensity, and in many other respects; but all exhibit the same general sequence of events. We shall describe these phenomena in greater detail as we proceed.

Interactions of the Long Waves and Short Cycles.—Although the short cycles move more or less independently of the long waves, they have their center or focus in the latter, so that the heights reached in a period of prosperity or the depths to which economic activity descends in a depression depend very largely on which phase of the long wave is prevailing. Looking back at Figure 7, notice that in the two decades from 1900 to 1920 we were on the crest of a long wave that kept us at a sustained high level of productivity. Although there were four depressions in this period, they were moderate in character, so that the level of production and trade never descended below the horizontal norm. By 1920, however, a slight downturn in the long wave was already noticeable. This carried us into a fairly severe

depression (the line falling below the normal) in 1921. The full effects of the long wave decline were not felt, however, until the 1930's, when we experienced in the trough of this wave one of the most severe depressions in our history. Even the recovery which took place in 1937 did not carry us up to the normal trend line because we were still under the influence of the long-wave downward movement.

The chart shows clearly the interaction of the two types of fluctuation, and the scales on the vertical margins enable us to measure the relative degree of stimulation or depression attained. At the peaks of the long waves, the short cycles rise nearly 40 per cent above the normal line, and the depressions do not fall below it, but in the troughs of the long waves, economic activity is depressed sometimes to nearly 60 per cent of the normal, and even the periods of prosperity do not reach a height of 100 per cent. This shows convincingly that the longer convulsions of the economic process are seriously disturbing phenomena, more serious than the shorter business cycles.

B. Causes of the Fluctuations[4]

External and Internal Causes.—If we think of the economic process as consisting primarily of those phenomena that are associated with money and the price system, it is apparent that important events occurring outside of that system may exert great influence upon it. For instance, there are said to be periodic movements in natural phenomena, such as temperature and rainfall, which are supposed to cause variations in the yield of agricultural crops. Since agriculture is an important branch of production, fluctuations in it may upset the balance of industry, and thereby affect business conditions generally. Other economists have stressed the influence of such cataclysmic events as earthquakes and wars, which may seriously disturb the economic balance of a nation, or a whole group of nations. A number of writers have emphasized the importance of new discoveries and inventions as factors which give an impetus to industry, and thereby start an expansive movement which eventually spins itself out, until some new impelling occurrence comes along to stimulate another expansion

There is some reason to believe that wars are chiefly responsible for the long waves of economic fluctuation, as we shall see. It is probable, too, that certain happenings in agriculture play a part in these long undulations, but they are more likely a reaction to warfare than to weather changes.

Neither wars nor climatic variations will suffice to account for all the phenomena of the short business cycles Although no two of these cycles are exactly alike, the fact that they have a generally similar pattern suggests

[4] Except for the paragraph entitled **The Influence of Major Wars,** this section is largely a condensation of matters more fully discussed in Bye's *Principles of Economics A Restatement* Therefore it may be omitted in courses where both works are used as textbooks

that there must be something in the nature of the economic process itself which is responsible for them. Even though a war or an important basic invention might start an expansion, we have still to look within the economic process for the forces which cause the expansion to take the particular form that it does, and which eventually bring about a reaction that culminates in a depression. Perhaps the most reasonable attitude is to regard certain factors in the economic process as making for a condition of inherent instability of such a nature that any disturbing force, either from within or without the system, can set in motion an expansion or contraction which is cumulative and rhythmical in character. What these internal factors are will be developed in the course of our analysis.

The Influence of Major Wars.—Silberling claims that the long waves of economic fluctuation are closely correlated with the occurrence of major wars. The upswing from 1740-1760, shown in Figure 7, coincided with a number of wars in Europe, India, and the American colonies. The second upswing (from 1780-1800) followed the war of the American Revolution, and was accompanied in part by the French and Napoleonic Wars. The crest of the long wave in the 1850's was about the time of the United States wars with Mexico and the Crimean War in Europe, and it was immediately followed by our Civil War and the Franco-German War. The high wave of the 1900's was accompanied by a number of wars in various parts of the world,—particularly by the First World War Although the correlations are not in all cases exact, it is not unreasonable to believe that there may be some connection between the two phenomena. He believes, therefore, that such wars are the primary cause of the long undulations.

Building partly on the work of another American economist, Leonard P. Ayres, Silberling traces the following sequence of causation· A great war is accompanied by a marked inflation of commodity prices, due to the enormous expenditures of the government for war goods, which expenditures are financed in considerable part by monetary inflation. The shortage of many goods, for which there is an increased demand in wartime, is likewise a factor in the rise of prices. Since rising prices cause higher profits, business is generally stimulated. Farmers, especially, feel the benefit of higher prices for foodstuffs and agricultural raw materials. Encouraged by their increased profits, they endeavor to expand their output by putting more land under cultivation and by using more intensive methods. This expansion entails considerable extra expense for fertilizers, wages, machinery, and permanent improvements. The farmers meet these expenses by mortgaging their farms, thereby becoming saddled with a fixed debt which may run on for several decades. The mineral industries (which provide important war materials) behave somewhat similarly. When the war comes to an end, the collapse of the abnormal government demand causes a rapid deflation of prices, especially in the extractive industries. These industries are then

less able to buy goods from other producers. The result is a general reduction of business activity, which may be called a primary postwar deflation, and which is of short duration because the wages of city workers (which were raised during the inflationary war period) do not fall much in the initial deflation, leaving urban workers more prosperous after the fall in prices than they were before. They then have an opportunity to buy durable consumer goods, such as home improvements, automobiles, washing machines, and other electrical appliances, which they were unable to obtain during the war. The increased demand for these things compensates manufacturers to some extent for the reduction of war orders from the government, and gives a general fillip to manufacturing industry, bringing the primary postwar deflation to an early end and leading to a general short wave of prosperity. Notwithstanding this, the extractive industries remain depressed because the prices of their goods do not respond sufficiently to the upward movement, and because the fixed debts which they have incurred during the war period prevent them from reducing their costs in line with the lower prices prevailing. Their profits are correspondingly reduced. The resulting unbalance between the extractive and the manufacturing industries upsets the equilibrium of the economy as a whole, and causes a long wave of depression which may persist for some decades. Silberling believes that these tendencies are reënforced by waves of political conservatism and radicalism. The periods of stagnation are times of political unrest, when the people turn to drastic reforms and panaceas that shake the confidence of investors and thereby help to retard business.

There is considerable plausibility to this reasoning, and it may eventually be established that wars are indeed the basic cause of the long fluctuations. The theory cannot be accepted finally, however, unless and until it is confirmed by the work of other investigators. As to the short cycles, there is no doubt that wars exert some influence upon them; but warfare in itself will not account for the persistent recurrence of these cycles every few years in both the upward and downward phases of the long waves. Let us, therefore, consider some of the theories that have been offered in explanation of these short cycles. They are too numerous for us to describe them all, but we can summarize a few of the more important ones.

Psychological Waves of Optimism and Pessimism.—One group of students believes that business cycles are the result of waves of feeling which sweep over the business world from time to time. According to this view, the phase of prosperity is one in which businessmen are unduly optimistic, and this begets unwise and reckless adventures. There is a process of cumulative error, resulting from an exaggerated estimate of the possibilities of expansion. The errors are presently revealed when market realizations do not come up to expectations and profits are succeeded by losses. The resulting disasters cause a feeling of worry and anxiety, often of actual fear, which

permeates the world of finance and is partly responsible for the collapse of credit. This is succeeded by a tone of pronounced pessimism, which helps to maintain the depression and prevent the speedy recovery of business. Too much stress is laid on these factors, however, when sole responsibility for the occurrence of business cycles is laid at the door of social psychology. There must be underlying economic causes for the changing mental attitudes of businessmen. Hence it seems probable that waves of optimism and pessimism accompany, accentuate, and perhaps prolong prosperity and depression, but are not the primary causes.

The Underconsumption or Oversaving Theory.—A very popular theory, especially in the United States, may be summed up in the words oversaving and underconsumption. According to this theory, too much is saved in relation to what is spent for consumption. Saving leads to an increase in the stock of capital equipment, which eventually increases the output of consumers' goods. But consumers' expenditures are not sufficient to purchase these goods at prices which will cover their costs; prices must therefore fall, bringing losses to producers, and precipitating a slump in business activity. According to this analysis, the fault lies in excessive thrift.

Socialistic writers, who are the originators of this theory, believe the basic cause is the unequal division of income which prevails in capitalistic society. The propertied classes have so much that they cannot consume it all and must, almost of necessity, invest it in industry; but the wage-earners, who constitute the masses of consumers, receive so little that they are unable to buy the resulting product. Other economists say that the source of the difficulty rests in the fact that wages do not go up as fast as commodity prices in periods of technological progress or cyclical boom. The resulting lag of costs behind selling prices gives rise to excessive profits, which profits are reinvested, so that productive capacity and output increase at a more rapid rate than expenditures for consumption. There may also be some lag in farmers' incomes, which likewise slows up demand for consumers' goods, as manufacturing industries rely to a considerable extent upon farmers to buy their output.

For many years this theory was confined to socialistic writers, and was generally opposed by most economists. They rejected it because they believed it to be inconsistent with Say's law, and because they thought the balance between consumption and saving would be maintained by the regulative action of the interest rate. Since the depression of the 1930's, however, the theory has been supported by a number of economists of recognized ability, particularly those who belong to the Keynes-Hansen school of thought.[5]

[5] Keynes' theory is not a theory of cyclical depression, but of chronic stagnation. Therefore, it was dealt with in the chapter "The Problem of Unemployment" rather than here. It is, however, definitely an underconsumption theory, and can easily be adapted to the short cycle problem.

It must be admitted that it is possible for the amount of investment to be too large, in relation to expenditures for consumption, just as it is possible to produce too much of any commodity, such as coal, in relation to the demand for it. The actual or prospective earnings of investment will then fall, just as the price of coal would drop under such circumstances. In both cases, the decline sets in motion forces which tend to restore a balance. When the price of coal falls below the cost of producing it, less coal is produced, so that the price rises again. Likewise, when the earnings of investment fall below the rate which will induce savers to invest funds, the supply of savings should shrink until earnings rise again. It is conceivable that this drop might take the form of a crisis, and lead to an ensuing depression. In the optimistic exuberance of a period of expansion, investors might not anticipate the reduced earnings which would follow from too great an increase in capital equipment until the oversaving had gone so far that a critical period of readjustment was inevitable. The theory has, therefore, some plausibility; but its truth has yet to be demonstrated conclusively, and even if it be accepted, it must be supplemented by some of the other explanations, especially those which emphasize monetary factors, on which it lays very little stress.

Monetary Inflation and Deflation.—The business cycle is a phenomenon peculiar to those economies which have a highly developed system of money and credit. Many of its characteristics, in fact, are clearly monetary in character. The period of revival and prosperity is one of monetary inflation, when an increase in production is financed by expanding bank credit, and accompanied by a consequent increase in the general price level. The crisis, if at all severe, is conspicuously a time of financial strain, when credit is hard to obtain, loans are being called, and everybody is seeking to make his position as "liquid" as possible, by converting his assets into cash. Credit then shrinks noticeably in volume, hoards of cash are accumulated, and bank balances are allowed to lie idle. Thus the circulating medium contracts, constituting a deflation, which continues during the depression, accompanied by a fall in prices due to the reduced flow of currency.

These facts lead some economists to attribute the short cycles almost entirely to monetary causes; but this is too simple an explanation. Monetary phenomena are obviously a feature of business prosperity and depression that must be included in the explanation, but it is too much to attribute the short cycles to this cause alone. We must recognize that there are maladjustments in the underlying structure of production, income sharing, and consumption, which are partly responsible for the monetary disturbances.

The Monetary Overinvestment Theory.—Many observers have noticed that the short cycles of business activity are most marked in the durable goods industries. This may offer a clue as to where the cause of the cycle is to be found. One theory that builds on this clue is the theory of overinvestment.

It would be more appropriate to call it the theory of attempted overinvestment, for it is the essence of this explanation that producers, miscalculating the prospective economic situation, attempt the construction of industrial plant in excess of the physical or financial resources that are available. In so doing, they make various commitments that later prove to be impossible to carry out. Their failure to make good on these contracts precipitates a crisis.

The *monetary* overinvestment theory (which has the support of many competent economists) stresses particularly the belief that, in an upswing of business the quantity of investment exceeds the amount of voluntary saving. This is made possible by the power which the banks have to create the money they lend. When a commercial bank makes a loan to one of its clients, it does not necessarily turn over to him cash. Usually it merely enters on its books a credit in his name, against which he can draw checks. The credit is called a deposit, but the only thing actually deposited is the borrower's promissory note, and probably some collateral security. The "money" he gets has not been saved and left in the bank by anyone; it is created on the spot, in the very act of lending. Nevertheless it *is* money, which the borrower can use to buy goods. When checks are drawn against these deposits, only a small proportion of them has to be honored in cash by the banks. Most of them can be cancelled by being offset against each other, through the mechanism of the clearing house. So the banks can make loans which are several times as large as their cash reserves. In a period of business expansion, when the demand for loans is growing, the banks respond by creating more deposits; and they can go on doing this up to the limit which their cash reserves permit. The effect is an expansion of monetary purchasing power. Although the loans may be nominally for short periods, the borrowers may expect to renew them indefinitely, or to obtain funds for their repayment from the sale of securities. So, purchasing power is put into the hands of businessmen for permanent investment, which means that they are given funds with which to buy durable equipment in competition with consumers' expenditures for immediately consumable goods. The currency expansion causes prices to rise, but consumers do not at first have any more purchasing power than before. Consequently, they can buy less of consumers' goods. They have been forced into abstinence by rising prices, in order that new capital might be created through the inflation of bank credit. This is sometimes referred to as "forced," or involuntary saving. It consists, not in the laying aside of money, but in the reduction of consumption imposed upon them by higher prices.

Two difficulties are created by this process: (1) eventual shortage of funds with which to complete the financing of the investments thus begun; and (2) a rise in the costs of such investment, due to subsequent increase in the demand for immediately consumable goods. Consider the first of these diffi-

culties. The expansion of investment takes place on the assumption that eventually securities can be sold to investors to make good the advances from the banks. But since the amount of investment exceeds the amount of funds made available for the purchase of securities by voluntary savings, the process can go on only so long as bank credit expansion can continue. This has its limits. When bank reserves get dangerously low, so that further expansion of credit is impossible, many businessmen are caught without any means of financing the completion of the capital construction projects which they have undertaken. This might be enough in itself to start a downward movement.

It is accentuated by the second difficulty—the rising costs of the construction projects which are under way. The rising rate of interest, attendant upon the growing scarcity of bank credit, is an important factor here, and there is another of considerable significance. When the funds created by the banks for new investment are spent by businessmen in the construction of durable equipment, they lead to an increase in the money incomes of wage-earners, as well as of others who supply the productive factors employed in the construction work. While some of this extra income is no doubt saved by the recipients, most of it is probably spent in consumption. Thus there arises a great increase in the demand for consumption goods at the very time when enterprisers are trying to increase the stock of durable equipment. Since this equipment will not yield its products until some future time, it is not yet available to satisfy the pressing demand for consumable goods. The result is a sharp rise in the price of consumption goods, which leads the producers thereof to bid actively against the makers of equipment for the available agents of production. This raises the costs of making the equipment above what was anticipated, so that prospective profits are turned into losses. Consequently, the investments prove a failure. The projects which were started may never be finished, or, if completed, their value will be less than the amount invested in them. So the boom, started by the expansion of credit, collapses, and a period of deflation takes its place. Now investment falls short of voluntary saving, leading to an accumulation of idle bank balances and other hoards. This makes credit abundant and cheap, favoring a revival of investment, which eventually ensues. Then a new expansion begins.

Observe that this theory finds much of the trouble in bank credit inflation and deflation, being thus in harmony with the monetary theories. But it goes further, by explaining the unbalance which prevails between those industries which are producing durable equipment and those which are making goods for immediate consumption.

Magnified Fluctuations in Demand for Durable Goods.—It was observed above that those industries which are engaged in the production of durable goods (such as buildings and industrial plants) are the ones which suffer

the most extreme fluctuations in the different phases of the short cycle. One reason for this is explained by the so-called principle of acceleration, better termed the *principle of magnified demand.* This principle states that slight changes in the demand for finished consumers' goods will cause much more drastic changes in the demand for the equipment used to produce them This can be explained by a simple illustration. Suppose that a branch of the textile industry uses 10,000 looms of a certain type, and that the average life of these looms is ten years. If the looms were originally purchased at different times, it may be assumed that, when the industry is operating at normal capacity, about one-tenth of them will wear out and need replacement each year. The makers of the looms, accordingly, could expect a demand for 1,000 of the machines annually. Now suppose that in a certain year there is a decline of 10 per cent in the demand for the fabric made with these looms The makers of the fabric will then need only nine-tenths as many machines as before; therefore, they will not replace the 10 per cent of the machines that wear out in that year. This reduces the demand for looms from 1,000 machines to zero. On the other hand, assume a 10 per cent increase in the demand for the fabric. To meet that, its makers will need, not only to replace the looms that wear out, but an additional thousand looms. Demand for looms in that year will rise to 2,000, which is double the usual demand So it appears that a 10 per cent fluctuation in the demand for the fabric may cause a 100 per cent fluctuation in the demand for the looms. This illustration is typical of what happens to the equipment producing industries generally, when consumers' demand for finished goods changes. The precise amount of fluctuation will differ according to the life of the equipment in different industries, but the variations in the demand for equipment will always exceed the changes in demand for its products.

Much the same thing is true of durable consumer goods. If consumer incomes decrease, they will continue to buy food and clothing but will cut down drastically their purchases of new houses, furniture, automobiles, and the like. If their incomes increase, they will not buy much more food and clothes but will buy more of the durables. So the producers of the durable consumer goods suffer extreme fluctuations.

The Uneven Movement of Costs and Prices.—We have seen that the ups and downs of business activity are accompanied by a rising and falling level of prices. However, all prices do not move exactly the same way. Some are much more responsive to inflationary and deflationary influences than others In particular, wage rates are less flexible than commodity prices, especially in organized trades; while interest on fixed money debts, and amortization charges for the same, do not change at all during the life of a given loan.

These disparities are undoubtedly significant in accentuating the movements of the short business cycle. When commodity prices begin to rise as a result of some expansionary impulse in the economic system, the lag of

wages and interest causes a widening spread between costs and selling prices, which spread is a source of increasing profits to businessmen. These profits encourage further expansion, aided by the banks, and the expansion becomes cumulative. As the upward movement proceeds, unemployed labor, unused plant capacity, and hoarded savings are gradually drawn into industry until they become increasingly scarce. In an attempt to continue the expansion, enterprisers then bid up the prices of these factors, so that at this stage they rise faster than the increase in the prices of finished products. Profits next begin to shrink, and may easily be converted into losses. Those industries which have the greatest difficulty in raising the prices of their products will be hardest hit by the increase in costs, and may be forced into bankruptcy The expansion then comes to a halt and recession sets in. In the ensuing deflation, the flexible prices fall faster than the inflexible ones, and, in particu lar, the selling prices of commodities drop more rapidly than such factor costs as wages and interest. This turns profits into losses for some producers and so accentuates the deflation. In the ensuing depression, unemployment becomes extensive and hoarded funds excessive, leading to a slow decline in wages and interest rates, until eventually they reach a point low enough to permit a revival. This theory explains some of the factors which aggravate the movements of the business cycle, but it is not a complete analysis.

A Typical Short Cycle.—By drawing the threads of these various theories together, we will now be in a position to get a fairly clear picture of how the short cycle runs its course. Let us begin with the assumption that a depression prevails, and trace the factors which start a revival. The depression is a period when ample resources are available for expansion, and when costs of production are low because wages, interest rates, and the prices of materials have fallen. Hence, any new stimulus can readily start an expansionary process. Such a stimulus may come from the urgent necessity of replenishing depleted stocks of merchandise or replacing wornout equipment. Or, some external event (such as a war, a new invention, or increased demand from abroad) may give the needed impetus.

By one or another of these stimuli, some producers are led to increase their output. In so doing, they hire more labor and buy more products from other businessmen. The re-employed wage-earners and businessmen, in turn, increase their demands for goods. So, the expansion spreads from industry to industry. As it gets under way, selling prices rise faster than costs, leading to profits in the manner described in the paragraph above. The process is cumulative, the monetary medium necessary for continued expansion being supplied by bank credit inflation. Confidence grows to optimism and optimism develops into enthusiasm. Before long a wave of prosperity is in full swing.

In this process of expansion, the various troublesome factors described in the several theories above have been at work. There are the initial stimuli

from external events and internal developments. The psychology of optimism, tending to errors of overanticipation, is present. Monetary inflation is developing and, as a result of this, investment is running ahead of voluntary savings. Demand for durable goods is being magnified. Productive capacity is increasing faster than consumption, and selling prices are running ahead of costs.

All of these tend to generate strains in the economic process which must, sooner or later, reveal fundamental weaknesses in the situation. So long as unused plant capacity, unemployed labor, and ample reserves of credit are available, these weaknesses may not appear to be serious, but when production approaches the point where existing resources are fully utilized, and credit is near the limit of expansion which existing bank reserves permit, further expansion becomes increasingly difficult. In the exuberance of the boom, construction projects may have been begun on the assumption of a continued increase in demand, which projects now come to a halt for lack of finances with which to continue them; or, the total volume of undertakings which have been contracted for may exceed the capacity to produce. Overinvestment is thus beginning to make itself felt. Frenzied bidding for the scarce agents of production ensues in order to complete these contracts. This raises the price of the productive agents to the point where costs rise above the actual or prospective earnings. Costs have also been increased by the growing inefficiency which characterizes a period of active business. Meanwhile, credit is increasingly difficult to obtain, the banks becoming uneasy because of their shrinking reserves and the increasingly precarious position of many business enterprises.

Recession sets in when some important industry or group of industries incurs such losses that it cannot meet its obligations. Some large businesses fail, and, in failing, may cause failure of the banks which financed them. This, in turn, causes difficulties for other concerns which depended upon those banks for credit. Then starts a process of progressive contraction which is just the reverse of the expansion previously described. The industries which are first to curtail dismiss their employees, stop paying dividends, and may not even pay interest on their bonds. This reduces the incomes of wage-earners and property owners, who are thereby forced to curtail their expenditures. There is then a decline in demand for products of other industries, which, in their turn, are forced to contract. A general process of liquidation ensues, in which commodities and securities are sold on the markets for whatever prices they will bring. Prices fall, but costs fall less rapidly, causing further losses and accelerating the general downward movement. The process of contraction gathers momentum, until production and employment are reduced to a low level.

If serious bank failures occur, the crisis may degenerate into a panic, in which depositors, fearing the loss of their deposits, rush to the banks to draw

out their funds in cash. Since bank deposits in our system are covered by only partial reserves, there is not enough cash to make these payments, so the banks are forced to close. This collapse of bank credit paralyzes business, and creates a condition of chaos. Panics do not accompany every recession; they occur only in crises of unusual severity.

The fall in prices necessitated by liquidation sounds the death knell to business profits, and without the prospect of profits business activity does not go on. A period of industrial stagnation follows. Industrial plants close down or continue to operate at less than normal capacity. Thousands, even millions, of employees are laid off. Wages drop and poverty is widespread.

The period of stagnation will be more or less severe, and more or less prolonged, according to which phase of the long wave is prevailing, and according to the circumstances of the particular case. Eventually it runs its course, and business gradually recovers, in the manner explained at the beginning of this analysis. The cycle is then repeated.

C. Control of the Fluctuations

The Need for Business Stability.—There are some people who say that economic fluctuations are not undesirable. Progress in production, they believe, takes place rapidly only when inflation is going on, while the subsequent reaction of depression is necessary to correct the mistakes which take place during the period of prosperity. Most persons, however, would object to this view as unduly pessimistic. Our economic system must be a poor one indeed if we cannot hope to make progress save by spasmodic convulsions. The apparent prosperity of the expanding phase is largely an illusion, because in this period so many mistakes are made which must later be corrected. The resulting depression is a harvest of calamity and suffering. Can we not hope for a more orderly and stable course of business activity?

Three Obstacles to be Overcome.—There are three obstacles which must be overcome before we can hope really to eliminate the severer phases of economic fluctuations. In the first place, we must be sure that we understand their causes. In the past there has been such diversity of opinion among economists on this point that it was difficult to know what sort of remedy was most likely to prove successful. It is becoming increasingly apparent, however, that the various theories supplement each other in such a way that they can be synthesized into a fairly consistent whole. This gives grounds for believing that some measures can be agreed upon that should prove effective at least in mitigating the severity of business depressions.

A second and very serious obstacle to the attainment of economic stability exists in the recurrence of wars. We have seen that these wars are a factor in, and perhaps the basic cause of, the long waves of business activity, and that they also have important effects on the short cycles. In modern times

especially, warfare requires a tremendous productive effort which drastically affects the entire economy. We cannot hope to smooth out the fluctuations so long as these disturbances continue to recur. Not until the nations of the world have succeeded in finding some way of settling their differences by peaceful means can we really deal effectively with our economic convulsions. In this matter the economist must wait for statesmen and political scientists to solve the underlying political problem.

Finally, so long as business is conducted by many thousands of individual enterprisers, each of whom is free to follow the dictates of his own judgment, there will continue to be possible a lack of balance in industrial affairs that may throw business out of adjustment. To correct this may require a much more centralized supervision of economic affairs than now exists—a wisely directed system of economic planning, possibly some socialization of industry. These are issues so complex, reaching, as they do, deeply into the roots of the economic order, that we must leave them for fuller discussion at a later point in our study.[6] Meanwhile, we may consider some measures of control which will at least mitigate the short cyclical fluctuations. There are several possibilities.

The Control of Money and Credit.—We have seen that practically all students agree that the phenomena of money and credit play a very important part in the ups and downs of the short cycle. Whether or not one accepts a purely monetary theory, it is clear that expansion and contraction of the medium of exchange, especially of bank credit, provide a vehicle for the rise and fall of business activity, without which the movements could not assume the form that they do. Bank credit expansion makes available the funds for involuntary saving, overinvestment, the expansion of durable goods industries, and the rise of prices and profits, on one or more of which phenomena several theories of the cycle lay stress. Subsequent collapse and progressive shrinkage of credit are deeply involved in the process of liquidation and falling prices which characterize the downward spiral of recession. Therefore, it would appear that the most hopeful approach toward reducing the severity of cyclical fluctuations would be through the control of money and credit. Various devices are at the disposal of the government by which bank credit expansion in time of revival could be resisted, and perhaps prevented, and by which contraction in time of recession could be checked, or at least reduced in severity. Many students believe that resolute and intelligent use of these controls could impart a considerable degree of stability to business activity. Others believe that we can go even further, through the adoption of a definitely managed currency which will maintain a stable general level of prices. These proposals will be developed in greater detail in the next two chapters.

[6] See the last three chapters of the book.

Public Works and Fiscal Policy.—In Chapter X it was suggested that cyclical unemployment might be reduced by liberal government expenditures for public works during business depressions. This same policy can be used to combat the depression itself. We have seen how, at a time of crisis, the curtailment of activity in one or more important sections of industry starts a vicious circle of contraction, the reduction in spending by business enterprises causing a shrinkage of consumer incomes and consumer demand, which causes a further curtailment of business activity in other lines, and so on, until contraction becomes general. If, very early in the development of this downward movement, the government will step in with large expenditures to counteract the drop in business spending, the progressive decline can perhaps be checked, and depression avoided If such a policy is to be successful, however, it must be begun promptly, and it must be done on a large scale

This raises certain problems of fiscal policy. The funds to be spent by the government must be obtained in a way that will not have a depressing effect upon industry. This means that, for the most part, they must not be raised by new taxes, which would only reduce further the amount of private spending. The government must, therefore, borrow Even in times of business contraction the bonds of a strong government find a ready market, for the credit of such a government is good enough to inspire investors with confidence in spite of business uncertainty. Therefore, funds which would otherwise be hoarded will be loaned to the government, which, through its spending, can restore them to circulation The public works program, if financed in this way, has thus an inflationary effect which offsets, to some extent, the general tendency toward deflation This is just what is needed. It involves the danger, however, that it increases the public debt, so that if the desired stimulating effect on business is not soon achieved, and the deficit spending has to be prolonged, the results may be more serious than if the depression had been allowed to run its course For this reason a governmental spending program of the sort here suggested is opposed by conservative critics, who believe that government credit should be kept unimpaired by keeping its expenditures strictly within its revenues. We shall return to this controversy when later we come to the chapters on public finance.

There are certain other weaknesses in the public works proposal. The government spending may not be in the direction that will be likely to correct the maladjustments that have caused the recession. It may help to keep up certain prices and costs, particularly in the construction industries, which ought for the sake of balance in the economy to be lowered. Furthermore, there is the possibility that it may produce an artificial revival, based on the prop of governmental support, which will be followed by another collapse as soon as that prop is withdrawn For these reasons, a public spending program must be directed with care, and it must be tapered off gradually

as private business revives. Moreover, public works must not be regarded as a complete solution to the problem of business depressions. They are an expedient to be used only in an emergency.

The Use of Unemployment Reserves.—In Chapter XI there was a discussion of unemployment insurance as a means of providing for the support of labor during periods of unemployment. This, too, has some tendency to offset the deflationary influences of business contraction, for it helps to maintain the spending power of a great many consumers at a time when their expenditures would otherwise be drastically reduced. Whether or not this represents a net increase in the total volume of monetary expenditures in the economy depends on the source from which the unemployment benefits are derived. If the funds which are paid to the unemployed are merely diverted from expenditures that would have been made anyway somewhere else in the system (as might be the case if the funds were derived from taxes levied at the time of payment, for instance), they have no expansionary effect. On the other hand, if the payments are drawn from previously accumulated hoards, there is a net increase in the monetary circulation which should help to check the deflationary forces of the depression. It has been suggested that unemployment insurance reserves might be used in such a way as to accomplish this. During prosperity, receipts of unemployment insurance funds would exceed disbursements; during depression, disbursements would exceed receipts. Let the excess receipts in the boom be impounded in the Federal Reserve Banks by the government, thus withdrawing funds from circulation; then let them be restored to circulation during depression, in the form of unemployment benefits. This procedure will help to offset the inflationary tendencies of prosperity and the deflationary tendencies of depression.

The Guaranteed Sale of Output.—In a business recession, there always appears to be a lack of sufficient demand to buy the products of industry at prices which will cover the costs of production; and there is, in fact, a shrinkage in the monetary circulation that reduces the circuit flow, thereby causing a decline in prices. These things suggest that, if the demand for goods and the circuit flow of money could somehow be maintained, a depression could be prevented. Acting on this idea, a number of proposals have been put forward to have the government guarantee the sale of the entire output of industry, by offering to buy any excess that cannot be sold on the market without loss. It is reasoned (on the basis of Say's law) that the government could not lose much by such a policy because if it sustains industrial activity and employment by paying for goods, the money so received by businessmen will be passed on to wage-earners and others who benefit from the sale of goods, and will then flow back from these recipients into demand, thereby providing a market for resale of the goods the government has purchased. It is argued that the amount of goods actually purchased by the government need not be very great, because if businessmen

know that demand is going to be sustained, they will not curtail their production; therefore, they will continue to buy materials and pay out wages, dividends, etc., and the circuit flow, instead of being reduced by a general recession, will go on without much change. Any temporary slackening of the flow caused by underlying maladjustments in the economy will be offset by the government purchases, so that the recession will be short-lived and there will be no cumulative decline.

One scheme of this sort[7] would have the government create a Federal Reserve Corporation, which would purchase liens on unsold goods in business inventories at prices sufficient to cover the out-of-pocket costs of producing them. Liens would be taken on any standard commodity capable of being stored, including raw materials and many kinds of manufactured products. Money for the liens would be provided by creating deposits to the credit of the enterprisers, in Federal Reserve Banks. So long as the liens were in effect, the goods would be stored under government seal, at its expense, on the manufacturers' premises or elsewhere, to be released to the owners whenever the liens were repaid. The kind of goods eligible for lien could be varied to prevent the encouragement of overproduction in particular branches of industry, but the Federal Reserve Corporation would be obliged to purchase enough liens in the aggregate to sustain a full level of industrial activity. By advancing only enough to cover out-of-pocket costs, there would be no inducement to manufacturers to produce for the government except in times of slack demand. The covering of out-of-pocket costs would suffice to keep production going in such periods because it is better for businesses to keep going, if their out-of-pocket costs can be recovered, than it is for them to shut down. Owners of the goods could redeem their products at any time, and would be under obligation to take them before selling other goods in their inventories. In this way, the stored goods would be taken off the government's hands as soon as demand recovered. The Federal Reserve Corporation would not sell the goods itself, except in case of business failure on the part of the original owner.

The possibilities of plans of this general sort are limited because they do not correct the underlying causes of business depressions. They will not effect the redivision of income that would be necessary to prevent underconsumption, and they will not prevent investment from running ahead of voluntary savings; therefore, they leave untouched the basic maladjustments that are believed to be chiefly responsible for business cycles in the two most widely held theories of business cycle causation. Unless these defects are remedied, it is hard to see how so simple a scheme could achieve the desired results. However, it might check the downward spiral of liquida-

[7] See Frank D. Graham, "Full Employment Without Public Works, Without Taxation, Without Public Debt, and Without Inflation," in *International Postwar Problems* (October, 1945).

tion and deflation that is started by a business recession, and so it might mitigate the severity of a deflation while the correction of the underlying weaknesses was taking place. How much this would cost the government only experiment could tell. In any case, such a plan would need to be accompanied by constructive measures to correct basic weaknesses in the economy.

The Need for Flexibility of Commodity Prices and Costs.—We learned above that the uneven movement of commodity prices and costs, especially the lag of the latter behind the former, constitutes one of the maladjustments that leads to general business difficulties. It has been suggested that if all prices, including the prices of the agents of production, would move more evenly, maladjustments from this source would be eliminated. It is a problem of promoting greater flexibility of prices, so that equilibrium adjustments can be reached more quickly and easily Inflexibility of prices is due partly to monopolistic practices in both the commodity and labor markets, partly to the slowness of rate-making procedure in regulated industries, and partly to various frictions in the economic process. The breaking up of monopolistic price practices, and a greater willingness to readjust rates on the part of rate-regulating authorities, would be helpful in this connection. In the case of one price, the bank-rate of interest, less attention to bank reserves, and more attention to the long-time investment market seems to be needed. This calls for wise bank regulation

The promotion of greater flexibility of wage rates presents a special problem. If the economic process is going to continue its cyclical ups and downs, wages should rise more rapidly during booms and fall more rapidly during slumps than they now do. The problem is largely one of securing the intelligent cooperation of unions and employers. Unions are prompt to press for increasing wages during periods of revival and prosperity, but they resist tenaciously any efforts to reduce wages during depressions, so that wages have sometimes risen too quickly during booms, and have not fallen sufficiently during slumps. Underconsumption theorists and labor sympathizers have rather encouraged this attitude. Labor has as much to gain as any group from business stability. Depressions are particularly disastrous to wage-earners because of the widespread unemployment which they engender Yet the stubborn resistance of organized labor to wage reductions prolongs and intensifies depressions. Labor leaders must learn that reductions in money wages, by reducing costs of production, will help to hasten recovery. Moreover, they should recognize that lower money wages at such times do not mean lower real wages if wage rates are not reduced more than retail commodity prices. On the other hand, employers must recognize that if wages are to be flexible in a downward direction, they must also be flexible in an upward direction Freedom to move both ways in response to market influences will make for greater stability.

Another element of rigidity that needs to be removed exists in the widespread practice by business concerns of financing their capital requirements by means of long-time fixed debts, such as farm mortgages and bond issues which run for considerable periods of years. Throughout the life of these debts the interest charges are unchangeable, and the principal constitutes a fixed sum to be met when the loans expire. Where these debt charges constitute a relatively large part of the total expenses of a business, it is very difficult for costs to be reduced when selling prices fall. The result is that the business finds itself in trouble. What is needed here is a change in business practices by which capital requirements will be financed as far as possible by means that will not take the form of long-term obligations. For instance, improvements or expansion can be paid for out of current receipts or by sales of stock, rather than bonds. Where fixed debts must be incurred, there should be provision for their regular amortization each year so that they can be progressively reduced and will not constitute a Damocletian sword, ready to fall with destructive effect on the debtor concerns in times of stress.

On the whole, the outlook for more evenly adjusted prices and costs is not bright. The tendencies to rigidity in our economic system appear to be growing stronger as time goes on. The growth of monopolistic businesses, the increasing regulation of private enterprise by government, the rising power of labor organizations, and prevailing methods of business finance, all make for inflexibility. Therefore, it is all the more important to perfect means of directing our economic life which will check maladjustments of a serious character at their very inception, so that drastic readjustments will not become necessary. Whether this can be done within the capitalistic system of industry is one of the great questions which confronts our generation.

American Recovery Efforts in the Depression of the 1930's.—In the great depression of the early nineteen thirties, the United States government embarked on an extensive program designed to stimulate recovery. Four types of action were included in these efforts: (1) various measures of direct money inflation, including reduction in the gold content of the dollar, injection of more silver into our currency, issuance of Federal Reserve notes, and open-market operations; (2) loans to distressed debtors through agencies created for that purpose, including the Reconstruction Finance Corporation, Home Owners Loan Corporation, and the Farm Loan Corporation; (3) the vast public works program described in Chapter X; (4) efforts to increase the incomes (and hence the expenditures) of wage-earners and farmers, through the National Recovery Administration (which permitted employers to adopt codes curtailing output and limiting price competition, in return for their agreement to increase wages and reduce working hours), and through an agricultural adjustment program (described in Chapter XX) which provided a subsidy to farmers for restricting crop acreage, in the hope that the resulting curtailment of agricultural output would cause farm prices to rise.

The results of the program were disappointing. Although debtors' distress was considerably relieved, the various devices that were relied upon to bring about recovery were rather ineffective. Recovery was slow, and a full level of employment was not reached until the outbreak of the Second World War. In fact, an upturn occurred in Great Britain and other European countries (which had experienced the same depression) sooner than here. Some observers believe recovery in this country was actually retarded by the program because, they say, businessmen were reluctant to undertake commitments as long as the government was experimenting with various measures that it was thought might bode ill for private industry. Be that as it may, it is evident that the causes of business depressions lie so deep in our economic institutions, that we are more likely to succeed in preventing them by constructive efforts to remove those causes than we are to lift the economy out of a depression by monetary and other devices when it has once occurred.

Summary

Economic activity is subject to upward and downward movements which can be measured by various indexes. Study of such indexes for the United States reveals four types of economic change: (1) an upward secular trend, (2) long waves about this trend; (3) shorter waves (business cycles) about the longer ones; and (4) seasonal and random fluctuations. The long waves affect the intensity of the short cycles. The short cycles exhibit four phases recovery, prosperity, recession (or crisis, sometimes accompanied by panic), and depression.

Although economic activity may be influenced by external factors, its cyclical response to such influences is due to internal forces. Major wars are the probable cause of the long waves, and they have some influence on the short cycles. The short business cycles have variously been attributed to (1) psychological waves of optimism and pessimism; (2) underconsumption (or oversaving), resulting from inequality or from rising profits; (3) monetary inflation or deflation; (4) monetary overinvestment (investment in excess of voluntary savings) financed by bank credit expansion; (5) magnified fluctuations in the demand for durable goods; (6) the lag of wages and other costs behind prices in periods of expansion. These theories are not mutually exclusive; they are complementary. By combining them we can trace the causal sequence of the cycle.

Because economic fluctuations are wasteful and disastrous, we should attempt to control them. Measures which may help toward accomplishing this are control of money and credit, so as to check inflation and deflation; government borrowing for public works during depressions; the impounding of unemployment reserves in Federal Reserve banks during booms, to be released in depressions; the guaranteed sale of industrial output by the gov-

ernment; greater flexibility of prices and costs, especially of money wages. During the depression of the 1930's, the American government made strenuous efforts to promote recovery by means of direct monetary inflation, loans to debtors, public employment projects, and the raising of wages and farm prices, but the program was not very successful.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

A great deal of empirical work has been done in the study of economic fluctuations, especially by the National Bureau of Economic Research. The publications of this bureau constitute a veritable mine of information on the subject. Among the more outstanding inductive studies are: Wesley C. Mitchell's masterly analysis, *Business Cycles* (1913), and his later *Business Cycles: The Problem and Its Setting* (1927). A new edition of Part III of the earlier book has been published under the title *Business Cycles and Their Causes* (1943). Norman J. Silberling's prodigious work, *The Dynamics of Business* (1943), is a significant attempt to give meaning to the great mass of statistical material that is now available.

Very fair and comprehensive critical summaries of the various theories that have been advanced in explanation of business cycles, with synthetic explanations built thereon, are to be found in G. von Haberler's *Prosperity and Depression* (revised edition, Geneva, 1937), and Alvin H. Hansen's *Business-Cycle Theory* (1927). Haberler's work has been of great help in preparing the theoretical parts of this chapter. A monumental study of economic fluctuations along statistical, historical, and theoretical lines, is presented by Joseph A. Schumpeter in his *Business Cycles* (2 volumes, 1939).

On some of the problems of controlling economic fluctuations, see Paul H. Douglas' *Controlling Depressions* (1935), Alvin H. Hansen's *Economic Stabilization in an Unbalanced World* (1932), and John H. G. Pierson's *Full Employment* (1941).

A widely used textbook on the subject of this chapter is Wilhelm Röpke's *Crises and Cycles* (1936). Elmer C. Bratt's *Business Cycles and Forecasting* (third edition, 1948) is another comprehensive general text.

CHAPTER XIV

Stabilizing the Price Level

A. The Fluctuating Price Level [1]

Particular Prices and the Price Level.—In the last chapter we learned that rising and falling price levels are an aggravating factor in general economic fluctuations, and that it would contribute to a smoother course of business activity if the price level could be kept more stable. Our task in the present chapter is to examine price level movements more closely, and to find out what can be done to control them. To begin with, we must carefully distinguish changing relationships between the prices of different goods from broad movements that characterize prices as a whole. The prices of individual commodities and services are ever shifting—some rising while others are falling, in response to changes in the conditions of demand or supply. Scarcely any two of them move in exactly the same way, but in their many variations a general ascent or decline can nearly always be found. It is to this general movement that we refer when we speak of the price level, and it is only with this that we are now concerned. The problem of controlling particular prices will be dealt with elsewhere (Chapters XIX and XX).

An Index of the Price Level.—It is possible to measure changes in the level of prices by means of index numbers, similar to those used in the first chapter to measure national income, and in Chapter XIII to chart the course of economic fluctuations. To give a really adequate picture of changes in the *general* price level it would be necessary to include in the calculation the prices of a wide variety of things—commodities (in both wholesale and retail markets), securities, house rents, freight rates, wages, and so on. Such indexes have been constructed, but more often a less comprehensive index is used—one confined to a certain group of prices that is considered appropriate to the particular problem for which the index is to be used. One index that is commonly used in this way measures wholesale commodity prices. Another is made up of the items that go into the ordinary expenditures of workingmen's families, and so measures the cost of living.

[1] Although Part A of this chapter duplicates a good deal of the material presented in Part A of Chapter X of Bye's *Principles of Economics: a Restatement*, we believe that the fuller discussion of inflation and deflation herein, plus certain other matter not contained in the *Principles*, will warrant using the whole of this chapter as required reading, even in courses where both books are used.

The index of wholesale commodity prices computed by the United States Bureau of Labor Statistics will serve well enough to show how the price level fluctuates. This bureau now records regularly the wholesale prices of approximately a thousand representative commodities. By multiplying each price by a factor which represents the quantity of that commodity which was marketed in a base year chosen for the purpose, each is given a weight in the aggregation of prices that corresponds to its economic importance. The sum of all the prices, so weighted, constitutes the index for any particular year. By comparing the indexes for a series of years, the movement of the price level can be observed.

The solid line of Figure 9 shows the above-described index in graphic form, for the years 1800 to 1946. The dashed line shows changes in the cost of living since 1913. Looking at the wholesale price line, it will be noticed that during the period covered by the statistics there were three violent upward movements, followed by rather steep declines. Another rise was under way at the close of the series. In the severe convulsion that took place from

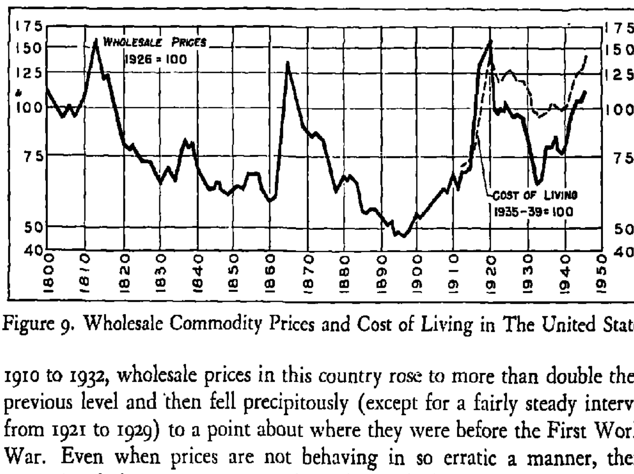

Figure 9. Wholesale Commodity Prices and Cost of Living in The United States

1910 to 1932, wholesale prices in this country rose to more than double their previous level and then fell precipitously (except for a fairly steady interval from 1921 to 1929) to a point about where they were before the First World War. Even when prices are not behaving in so erratic a manner, there is continual change going on, such as the gradual rise shown in the chart from 1896 to 1910, with lesser oscillations from year to year. A chart of prices for any other nation would show very similar changes. These facts indicate that price levels in the present economic order are very unstable.

An Unstable Price Level Means an Unstable Dollar.—These changes in the general level of prices show corresponding changes in the value, or purchasing power, of money. When prices are high, the value of money is low (for it will buy less in commodities), and *vice versa.* Our dollar, instead of being a fixed unit of measurement, is a quite variable one. This lack of

stability in our standard of value causes a great deal of inconvenience. Imagine buying groceries, using as our standard of weight a flexible unit which varied from month to month, and from year to year! In purchasing a pound of sugar we would never know just how much of it we would really receive, and there would be all sorts of opportunity for miscalculation and injustice, for at one time the grocer would be giving us less sugar to a pound that at another. Or, suppose we were accustomed to measuring cloth with a rubber yardstick, the length of which varied with the looseness or tightness with which it was stretched! In purchasing ten yards of material we would never know just how much we were getting. We are in exactly this situation when we deal in terms of dollars. When a wage-earner accepts employment at a wage of forty dollars per week, he has no way of knowing just what his real wage will be, for his forty dollars will not always purchase the same quantity of economic goods. If a man borrows a thousand dollars, agreeing to repay it at a later date, he cannot know just how great an obligation he has really assumed; for if the value of money changes, he will have to pay back more or less real purchasing power, as the case may be. In measuring weight, length, volume, temperature, the flow of electric current, the heat-giving capacity of foods, and the like, we no longer tolerate such uncertainty. We have devised invariable units, such as the pound, the foot, the cubic foot, the degree of temperature, the ampere, the calory, and other standards which are fixed and invariable. The lack of stability in our standard of value is equally intolerable, and should be corrected.

The Disastrous Effects of Changing Price Levels.—We have already seen that fluctuations in the level of prices are closely associated with those serious disturbances of business activity which were described in the preceding chapter. In fact, some economists attribute the movements of business cycles almost exclusively to changes in the value of the dollar. But this is not the only evil which arises from instability of the price level. There are others sufficient to condemn the present monetary system.

One of the worst of these evils is the disastrous effect on debtors and creditors. Suppose that a corporation running a chain of retail stores has borrowed $500,000 on bonds which mature in ten years. If the price level rises, the corporation's proceeds from the sale of its merchandise will be greatly increased, and it will require a smaller proportion of its total receipts to pay off this loan than it had anticipated, giving its stockholders unexpected (and undeserved) profits. The bondholders, on the other hand, will suffer a loss; for although they get back just as much money as they loaned, the money is not worth as much, so that their real wealth has been decreased. The change in the value of money has robbed the bondholders to benefit the stockholders. Had the price level fallen, the result would have been reversed. The corporation would have had difficulty in paying back the loan, and might even have been forced into bankruptcy, while the bondholders would

be receiving in actual purchasing power far more than they had loaned.

The far-reaching extent of the gains and losses to debtors and creditors caused by a fluctuating price level will be realized if we consider the enormous number of persons who are in either a creditor or debtor position. When the price level rises, millions of debtors, such as enterprisers and stockholders (whose corporations are often doing business on borrowed funds), reap profits at the expense of millions of bondholders and other creditors. These creditors may be educational foundations, who now find the income from their endowments inadequate to meet the increased money expenses caused by a rising price level. They may be the recipients of insurance funds, painstakingly accumulated through long years of saving to provide what was expected to be an adequate income for helpless widows and children, or to care for the declining years of old age. The rising price level is equivalent to confiscation of a part of the savings represented by these endowments, insurance policies, and so on. On the other hand, a falling price level makes it impossible for many debtors to meet their obligations. During the falling price level which accompanied the depression of 1930-1933, thousands of home owners and farmers lost their homes and farms because of their inability to meet the interest on their debts. These debts consisted of mortgages couched in the form of a fixed money sum, made at a time when prices, including the price of real estate, were high. When the fall in prices came, the money incomes of the mortgagors fell with them, until they reached a point where it was no longer possible to pay the interest on these mortgages. Foreclosures followed, and the wealth of the unfortunate debtors passed into other hands. Falling prices also meant the bankruptcy of many business firms, with consequent stoppage of industrial activity and the creation of unemployment.

An unstable price level also has far-reaching effects upon the prosperity of wage-earners. The labor market is sluggish, and money wages cannot be adjusted immediately to every change in the general level of prices. This is especially true where wages are fixed by collective agreements which run for considerable periods of time. The lag of wages is likely to injure the workers when prices are rising, because the cost of living goes up faster than money earnings; but in the organized trades this is less true than formerly, for strong unions in some cases are able to obtain successive increases, so that wages may rise at even a faster rate than other prices. Falling prices, however, are nearly always certain to bring disaster upon the laboring class, because they lead to unemployment. For those laborers who continue to be employed during periods of falling prices, however, there is likely to be some gain, for their wages will not usually decline as rapidly as commodity prices.

Rising price levels usually lead to increasing business profits, for business enterprisers finance their operations very largely on money loans, the amounts of which remain fixed while the selling prices of their merchandise increase.

They also gain, as employers, from the lag of money wages behind commodity prices. Finally, they gain from the fact that, as prices keep going up, the money value of the goods which they have purchased is continually rising while it is in their hands. By laying in stores of materials or merchandise in advance, and selling it later when prices have risen, they reap a corresponding profit. When prices fall, however, the effects upon businessmen are disastrous, for now the reverse of the conditions just described takes place. The prices of goods in producers' hands fall, and there is a loss on all stocks laid in in anticipation of future sales; wages fall more slowly than the prices at which commodities are sold; and money debts remain as great as before, while money incomes from business operations are declining It is these effects on the profits of businessmen that make the fluctuating price level an important cause contributing to business cycles.

A Qualification.—The above argument applies only to price level changes caused by expansion or contraction of money. Where, the flow of currency remaining unchanged, a movement of the price level is brought about by changes in the "real" or "physical" costs of industry, the relationships between debtors, creditors, enterprisers, and wage earners will not be generally disturbed. In progressive economies, technical progress tends to bring about a more or less continual increase in output, relative to the amounts of productive factors employed. This will permit a general lowering of prices without any decrease in the money rents, money wages, money interest, debt reduction, and the like, paid out by enterprisers. So long as prices fall no faster than real costs, then, enterprisers will not be injured; for, although they sell their products at a lower price per unit, they sell more units than before The total of their money receipts, in general, will be as large as ever, since the recipients of the money income stream will exchange it all for goods of one kind or another, passing it through enterprisers' hands, as heretofore. Neither will the other classes in the economy suffer because, under the conditions assumed, their money incomes will be no less than they were previously On the contrary, everyone will benefit by the fall in prices, for they can buy more goods than formerly. In this way all share in the generally lower costs made possible by improved industrial methods We shall have occasion to refer to this reasoning later in this chapter, when we consider the proposals of those who favor a "neutral" money policy

Monetary Inflation.—The evils of an unstable currency are most flagrant during periods of extreme monetary inflation. By inflation we mean any increase in the money flow not offset by an equal increase in the volume of trade There is always, in every country, a group of people, such as debtors, who gain by rising prices, and who, therefore, favor a "cheap money" policy. "Cheap money" means abundant money—that is, money of low purchasing power, reflected in a high level of prices A policy of inflation is most likely to be adopted, however, in time of war, when the financial resources of gov-

ernments are strained to the limit. Wars are exceedingly expensive, and it is very difficult to raise enough revenue by taxation to finance them. It is much easier to print paper dollars or create new bank credit with which to pay the government's bills for war supplies, for this money is readily accepted by the people and passes into general circulation. As the circulation increases, the price level begins to rise. Money is like other things—the more there is of it, the less it is worth; consequently, it takes more to buy a given quantity of goods when money is plentiful. Or, to put it another way, when people have more money in their possession, their money demands for commodities increase, and the prices of the latter rise as a result.

If the money issues of a period of inflation are small, the resulting disturbances need not be very serious. But if a war is to be fought, its expenses are likely to be terrific, and the government finds itself under pressure to inflate the currency in ever increasing quantities. In fact, it is soon enmeshed in the maze of a vicious circle, for, as prices rise, the purchasing power of its money issues declines, and its tax receipts will likewise provide less real income. Hence, it is forced to issue still larger quantities in order to make up for the deficiency. This pushes the price level higher and higher, making still larger money issues inevitable, until the circulating medium is swelled to an enormous size.

Excessive inflation of this sort took place in many European countries during and after the First World War. Beginning with small issues, the governments soon found themselves in the vicious circle of inflation. New issues were put out in increasing amounts until the monetary circulation rose to incredible figures. Even such financially strong nations as Great Britain and the United States did not escape this tendency, while in Germany and Russia the inflation exceeded all bounds. The following table, showing the paper-money circulation in a number of countries before and after that war, gives some idea of how extreme was the situation:

Paper Currency Issues in Certain Countries, 1914 and 1923 [2]

Country	*Monetary Unit*	*Note Circulation* 1914 (000,000 *Omitted*)	*Note Circulation* 1923 (000,000 *Omitted*)
Austria	Crown	5,138	4,113,000
Belgium	Franc	934	6,902
France	Franc	5,812	37,055
Germany	Mark	2,014	3,871,788
Italy	Lire	1,557	13,405
Russia	Ruble	1,590	450,000,000
United Kingdom	Pound	29	401
United States	Dollar	1,056	3,266

[2] The figures are those of O. P Austin, statistician for the National City Bank of New York, as given in the bank's Monthly Letter for April, 1923.

During and after the Second World War, the same sort of thing occurred in some countries. In Hungary inflation reached a point where money had to be issued in fantastically high denominations to keep pace with rising prices, some of the notes running in units of 1,000 trillion pengoes. These sums were beyond the grasp of the people, so business was done in terms of "blues" (1,000 trillion notes) and "browns" (100 trillion notes). Smaller notes for millions, and similar "trivial" sums, became worthless and were thrown away! By June 1946 the circulation of pengoes was 126 trillion times what it had been at the beginning of inflation.[3] In China, where the Japanese occupation of the richest part of the country deprived the central government of much of its ordinary sources of revenue, the war was financed by paper notes, printed in the United States and flown by the bale over the Himalayas to Chungking. The pockets of the coolies bulged with Chinese dollar notes of high denominations, but these would scarcely pay for the barest necessities of life. Such are the devastating effects of warfare on a monetary system.

How Inflation Confiscates Capital.—We can perhaps appreciate the enormity of the catastrophe involved in such inflation by considering how the wealth of thousands of people can be completely wiped out by it. Let us imagine the situation in Germany after the First World War. Thousands of investors had put their savings into mortgages on real estate, into the bonds of corporations, and into the bonds of the German government itself. In many cases these investments represented the entire fortunes of the investors. They were debts contracted in terms of German marks, and represented, at the time of the loans, large quantities of wealth. Then marks began to depreciate and prices began to soar. When prices had increased so many times that every commodity sold brought into the seller's hands thousands of times as many marks as it formerly had, it was a comparatively simple matter for the debtor corporations to pay off their bond issues and mortgages in the depreciated currency. It was as though a debt of thousands of dollars could be paid off for a few cents. In this way the debts of many corporations were practically wiped out. The investors received as many marks as they had originally invested, to be sure, but these marks were practically worthless. The fortunes of the investors were gone. They had been defrauded of their wealth by the depreciation of the currency. Even creditors of the German government, who bought bonds in good faith, found their value shrinking and shrinking, until they became so much worthless paper

The Problems of Deflation.—The results of excessive inflation are so obviously disastrous that sooner or later governments come to realize that it must be stopped and a sound and stable currency restored. Then arises a question as to what is the best method of bringing about such restoration.

[3] These facts are taken from a dispatch in *The New York Times*, July 2, 1946

Prior to the First World War, most governments considered it necessary to return to the gold standard, which meant that the inflated money would have to be replaced by money that would be redeemed in gold upon demand. If the inflation had not been too great it was sometimes possible, by heavy taxation and strict economy in government expenditures, to bring government finances to a point where there would be sufficient revenue to redeem the paper money issued during the inflation at its full value in gold. The United States succeeded in doing this after the Civil War by redeeming its "greenbacks" dollar for dollar, and this greatly strengthened its credit and the world's confidence in the integrity of our government. England was able to do the same thing with its currency after the First World War, though not without serious disturbance to its economy occasioned by the accompanying deflation.

If inflation has been very great, however, full redemption of the currency is impossible; and, even if it could be done, it would be as disastrous as the inflation which preceded it, for redemption means deflating the currency to the same extent that it was previously inflated. The retirement of the depreciated money reduces the total volume of purchasing power, and brings about a fall in prices to somewhere near their original level. Such a fall in prices is just as undesirable as the rise which accompanied the inflation.

Instead of redemption, then, the paper money must be either repudiated or devalued. If repudiated, it is outlawed entirely and a new standard currency, restricted in quantity, takes its place. The usual procedure, however, is to exchange the depreciated money for a new monetary unit set up to replace it. This is known as devaluation. The American government, after the Revolution, exchanged the paper money issued by the Continental Congress for metallic standard money at about one cent on the dollar. In most European countries after the First World War, new monetary units were set up, some with new names, and a fixed ratio of exchange was established between the two moneys thus circulating side by side. In time this permitted the governments to replace all of the depreciated currency with the new money at the ratio so established. Devaluation by such methods accomplishes the transition from a discredited to a sound currency with a minimum of disturbance.

Before the restoration of a sound currency is possible, the government must balance its budget; that is, it must succeed in making its revenues from taxes, loans, or other ordinary sources equal to expenditures. If it cannot do this, it has no recourse but to go on printing money with which to pay its bills. Hence the transition from a time of inflation to one of stability is a difficult period, calling for sound statesmanship and heroic measures.

B. Control of the Price Level

Why the Price Level Fluctuates.—We cannot hope to correct our unstable price level until we first understand the causes upon which the value of money depends. Like other values, it is very largely a matter of demand and supply—the demand for and supply of money. The demand for money consists of all the goods which are offered in exchange for it. The supply is made up of all the means of payment actually used in the purchase of goods. The value of money, therefore, depends upon the ratio between the total monetary circulation and the number of goods for which it is to be exchanged. But this simple formula is not enough. We must go into greater detail in order to see just what it is that makes up the money flow, and what constitutes the volume of goods offered in exchange for it.

Goods are more often paid for with checks than with coin or paper dollars. Money, therefore, includes not only gold and silver coin and bullion, bank notes, government notes, and the like, but also bank deposits subject to check. Some of this money may be used little or not at all, however, while other parts of it may be used a great deal. Most of our gold and silver coin and bullion is securely locked up in government strongholds and does not circulate in exchange. So long as this money is not actually in circulation, it cannot enter into the determination of prices. Some bank deposits subject to check may be carried on the books of the banks, but unless checks are actually drawn against them, they do not enter into the price-determining process. On the other hand, those dollars and bank deposits which actively circulate may be used over and over again in the course of a few weeks or months. Every time they are used they help to determine a price. An accurate indication of the total money flow which really enters into the determination of the price level, therefore, consists of (a) the volume of money, and (b) the rapidity of circulation (or turnover) thereof.

The demand for money, we have seen, consists of all the goods which are offered in exchange for it. These goods include not only physical commodities, but the services of laborers, the making of loans, the renting of real estate, and so on. In fact, every time there is a business transaction of any kind in which any commodity or service is offered in exchange for any form of money payment, the price level is affected thereby. Furthermore, if a given article passes through several hands, as when it is sold by a manufacturer to a wholesaler, by a wholesaler to a retailer, and by a retailer to a final consumer, a price is established at each such transfer. It therefore enters into the price level several times. We find, then, that the demand for money consists of the total number of units of commodities and services that enter into exchange; or we may say, simply, the total number of exchange transactions that take place within a given period of time.

The relation between these various elements is most conveniently expressed in an algebraic formula, known as the equation of exchange. This equation may be written as follows: $P = \frac{MV + M'V'}{T}$. Here P stands for the average, or general level, of prices. M represents the total stock of cash, either in active circulation or in bank or government vaults. V indicates the velocity of circulation, or rate of turnover, of this cash.[4] M′ stands for circulating credit. V′ is the velocity of circulation, or rate of transfer, of this credit from person to person and from bank to bank. T is the total volume of trade, or the number of transfers of commodities and services entering into exchange. It will be observed that the value of P (the general level of prices) depends upon the ratio between the numerator and denominator of the fraction with which it is equated. The numerator of the fraction represents the flow of money; the denominator represents the flow of goods. Any increase in the money flow tends to raise the value of the numerator and increase the magnitude of P. Any increase in the volume of trade, on the other hand, tends to raise the value of the denominator and decrease that of P. So the equation is just another way of stating the truth, that the general level of prices varies directly with the flow of money and inversely with the flow of goods into trade.

The General Principle of Stabilization.—So far as those violent fluctuations of the price level which arise from excessive issues of fiat money and their subsequent repudiation or devaluation are concerned, the remedy is clear enough. Governments must refrain from such reckless methods of finance and learn to pay their expenses out of revenues derived from taxes or from justifiable loans. More will be said on these questions in Chapter XXIV. But we must not be deluded by the thought that this will be easy of accomplishment. Sound government financing depends on the wisdom of officials and their willingness to avoid inflation of the currency. In times of peace this may be attained, but it is almost too much to expect in time of war. Wars cost so much that the burden of taxation required to finance them by ordinary means is more than the people, in most cases, would be willing to bear. At least, it is more than legislators have the courage to impose. Therefore they usually fall back, in the end, on some kind of inflation. Even if there are no issues of fiat paper money, there is inflation of bank credit, which has much the same effect. This takes the form of bank deposits, placed at the disposal of the government by the banks, as a means of paying for government bonds purchased by the latter. So we see that stabilization of the price level, like the stabilization of economic activity in general, can probably not be fully accomplished until a means of preserving international peace has been found.

[4] The velocity of that money which is held in the vaults as reserve is, of course, zero, and hence this money has no direct effect upon the value of P at all.

However, the problem of a fluctuating price level is not only one of wartime inflation and deflation. In times of peace, prices go up and down greatly, both with the phases of the short business cycle, and over longer periods, such as the slow upward trend from 1895 to 1914. How to correct these cyclical and secular movements is the problem to which the remainder of this chapter will be devoted. It is clear from our analysis of the equation of exchange that we could keep the value of P stable if we could maintain a constant ratio between the volume and velocity of money, on the one hand, and the volume of trade on the other. To regulate the latter, we would have to control the entire process of production—a task too vast for the present; but some economists believe it is both desirable and feasible to adjust the flow of money to the output of industry in such a way as to stabilize the price level. Their proposals are thus monetary in character.

The Neutral Money Proposal.—Although it is fairly obvious that arbitrary movements of the price level induced by monetary disturbances are undesirable, it is not clear that absolute fixity of the level is the best goal at which to aim. There is a school of theorists (including the present writers) who believe that what we should seek is a system of neutral money. By *neutral money* is meant money that would not interfere with the economic process in any way. It would be a passive thing, permitting exchange relationships to take place naturally, without any distortion from monetary causes. With such a system in effect, a change in the money supply would never be permitted to exert an inflationary or deflationary effect upon prices, but moderate changes in the price level might be brought about from changes in the "real" (physical) costs of production.

Let us see how this would work in a progressive economy like ours. For nearly two centuries there has been going on a gradual improvement in the techniques of production that has increased the per capita output of goods in this country by an average of a little more than 3 per cent annually. We may hope that this progress will go on in the future. If we were to stabilize the price level absolutely, it would be necessary to offset this increase in goods by an equivalent increase in the quantity of money. While this would not cause an inflation of prices, it would cause an inflation of money incomes, and this would be bound to have disturbing effects upon the economy. As in any period of rising money incomes, profits would be increased at the expense of wages, and debtors would gain at the expense of creditors. On the other hand, if money were neutral, prices would be allowed to follow changes in real costs, so that, as the output of industry increased, the general level of prices would fall slightly, at a rate of about 3 or 3½ per cent yearly. This would give us a price level much more stable than the one we now have (there would be no price inflations or deflations), but it would not be absolutely fixed.

At first thought it might seem that this gradual decline in prices would

have the disturbing effects upon debtors, creditors, enterprisers, and wage-earners, that was described in an earlier paragraph. However, this is not the case, for when a movement of the price level is brought about by changes in the physical costs of production (and not by expansion or contraction of money), these disturbances will not occur. This was explained in the paragraph above that bore the heading "A Qualification," but it will bear further elaboration. Suppose that enterprisers generally, while employing land, labor, and equipment at prevailing rates of rents, wages, and interest, introduce improvements that yield a larger quantity of goods. They can sell these goods at lower prices per unit without any reduction in their gross receipts, for they sell a greater number of them than before. There is, therefore, nothing in the situation to change the circuit flow of money The same quantity of money as formerly flows into enterprisers' hands, and is paid out by them to the owners of the factors of production, so that the average of money incomes in the economy remains at its former level. This being the case, the relations between creditors and debtors will not be altered, nor will the relations between profits and wages. All have the same money incomes, but all enjoy the benefits of greater productivity, by being able to buy more goods than formerly.

This analysis supports the view that we should aim at monetary neutrality, rather than at absolute stability of the price level. This means that we should seek to keep constant, not the average of prices, but the average of money incomes. We could do this by keeping the items MV and M′V′ in the equation of exchange substantially unchanged in amount, except that they would be allowed to expand gradually in direct proportion to the growth of population. For theoretical perfection, there might also have to be some slowing down of this expansion to offset any decrease in the number of exchanges (T) in the economy caused by the vertical integration of industry. Such integration, by eliminating transactions between formerly separate concerns in the successive stages of industry, would otherwise have a somewhat inflationary effect on the price level. As a matter of practical feasibility, however, it would not be necessary to go into all these niceties; we could probably come close enough to the ideal of monetary neutrality by keeping the supply of money at a fixed amount per head of population. This would be very simple.

Some Objections Considered.—While there is a great deal of support among economists for some plan of monetary stabilization, there is likewise some opposition. A number of objections have been put forward.

For one thing, it has been argued that any program for controlling the price or money income level in a given country would disturb the relation between its level and that of other countries with which it has trade, thereby disturbing rates of exchange between them and hampering the operations of foreign trade. For instance, it is said that if prices are held down

in the United States while rising in Great Britain, the British pound will fall in value relatively to the dollar. Since a pound will then buy less dollars, our goods will be relatively dearer to the British than they formerly were, and American exports to Great Britain will be reduced. Conversely, if prices in Great Britain are falling relatively to ours, their exports to us will be adversely affected. Consequently, it is reasoned, unless the principal commercial nations would agree to a concerted program of monetary management, intolerable disturbances would result. This argument seems unconvincing to the present writers. If prices in Great Britain are rising, it is because British pounds are more plentiful in relation to goods; therefore, the fact that more pounds must be offered for a dollar should work no hardship upon the British, and should not injure our export trade. The argument as to falling British prices can be met similarly, and likewise for all other countries whose price relations might be altered by stabilization of our dollar.[6] Anyway, such disturbances as might arise from this cause would be serious only in those countries whose foreign trade was very large, compared with their domestic industry. Where a country's foreign trade is of minor importance, stability of the internal price level is more to be desired than stability of its foreign exchange rates. The United States is in such a position. Our foreign commerce does not amount to more than 10 per cent of our total industry. The disturbances caused by fluctuations in the value of the dollar abroad, therefore, are less serious to us than fluctuations in the internal price level. Hence, it would be wise policy for us to embark on a program of stabilizing the price or income level within our borders, without waiting for the rest of the world to do likewise.

It is also argued against stabilization that, since any program to control the level of prices or money incomes requires the introduction of money into, or the withdrawal of money from, circulation, this is bound to disturb the natural price relationships between different commodities; the injection or withdrawal of money cannot affect all prices equally and at the same time—it must affect some before others. For instance, if we are trying to prevent a fall in prices by expanding our currency through paper money issued by the government, this will first raise the prices of those commodities and services which the government buys, and will throw them out of adjustment with other prices. If the expansion takes the form of additional bank credit, it is most likely to get into the hands of businessmen, who will use it for the purchase of industrial equipment, thereby disturbing the relation between the prices of producers' and consumers' goods. A contraction

[6] It is true that if some other country depreciates its currency *rapidly*, the exports of the stabilizing country will be temporarily reduced because its exchange rate will drop faster than prices in the depreciating country will rise. This will be explained more fully in Chapter XVI. But the remedy for this is not to meet depreciation with depreciation, because that would only aggravate the disturbance. Therefore this is not a valid objection to stabilization.

of bank credit would have the opposite effect. It is the view of the present writers that such disturbances of interprice relationships would be serious only if the volume of changes in the currency necessary to effect stabilization of the price or money income level were large, relatively to the total monetary circulation. However, once the program was well under way, the changes in currency necessary to prevent monetary distortions of the price or income level should be slight.

A third objection advanced against proposals for stabilization is that we do not yet have any measure of the general price level sufficiently accurate to guide the control program. Most index numbers measure only commodity prices, such as the wholesale price index described at the beginning of this chapter. But money is used to purchase not only commodities at wholesale, but also those at retail, and for such purposes as employing the services of labor, the renting of real estate, and other more or less intangible things. The value of money consists of what it will buy, on the average, of everything for which it is used. To construct an index number which will truly represent this is not an easy task, but progress in this direction is being made. Fortunately, we need not wait for a perfect index number before embarking upon a plan of stabilization. A program based on one that is even approximately correct would be a better guide than none at all. The neutral money proposal would not require an index number of the general price level for its operation. A mere census of population growth might suffice. At the most, there would be needed indexes showing changes in the size of the working population, in the quantity of land in use, in the amount of saving, and in the vertical structure of industry. The making of these specific indexes appears to offer less difficulty than the more general type of index required for maintaining an unchanging price level.

A fourth objection is that the government does not now possess monetary controls that are adequate for such a program The quantity of cash can be regulated easily enough, but bank deposits are much more difficult to contend with. In the next chapter, however, there will be described a method (the one hundred per cent reserve plan) which is clearly adequate to control the volume of demand deposits. Velocity of circulation is more intangible, less amenable to regulation; but if velocity slows down, new money can be issued to offset it, and if it speeds up, a compensating reduction in the supply of money can be made. This objection, then, does not appear to be insuperable.

Finally, it is objected that any program to control the price level would make our monetary system the football of politics. It is said that political tinkering with money in the past has done more harm than good. This is true however, only of paper money inflation. It can hardly be said that the control over our monetary system exercised by the Federal Reserve Board has, on the whole, been political. What is now advocated is that such controls

be directed toward a new objective. If the objective is clearly defined and the criteria to be followed are clearly set forth in appropriate legislation, it ought to be possible for the controls to be exercised without political interference.

A Multiple Standard of Debts.—It has been proposed that the injustices between debtors and creditors which result from changing price levels can be corrected without changing our monetary system. At present it is the practice for a debtor to repay his creditors as many dollars as were loaned to him, with interest. It is now suggested that, instead of doing this, he should pay back *as much real purchasing power* as he borrowed. This could be done by making the principal of the loan vary with some officially established index number of prices If a corporation issued a $1,000 bond in 1945, payable ten years later, and the price level rose 10 per cent during that period, the company should pay the bondholder $1,100 in 1955 in order to return to him as much purchasing power as was represented by the original loan. On the other hand, if prices fell, a creditor would receive less money that he invested. Interest payments could be adjusted similarly. If the reader has followed the analysis of the injustice to debtors and creditors caused by unstable prices, he will see that this multiple standard of debts is an arrangement equitable to both parties. As an emergency measure it is to be commended, so long as fluctuations in the level of prices continue. Had it been in effect during the depression of 1930-1933, it would have saved thousands of farm and home owners the loss of their properties through mortgage foreclosures, without injustice to the mortgagees However, the plan is at best a makeshift, for it corrects only one of the difficulties which result from changing price levels; and it permits the real source of the evil (the unstable dollar) to continue A more radical remedy must therefore be sought.

International Bimetallism and International Control of Gold.—From time to time it has been suggested that international bimetallism would render the price level more stable than a monetary system based exclusively upon gold Under bimetallism both gold and silver are made standard money, and the holder of either metal can have them coined in unlimited amounts at the government mints. It is generally held that no nation by itself can successfully maintain a bimetallic currency because of the operation of Gresham's law. For the sake of uniform coinage it is necessary to prescribe a fixed weight for both the gold and silver coins, thereby establishing an unchangeable mint ratio for the metals when used as money. But the market ratio of these two metals continually fluctuates, for it is not to be expected that the prices of gold and silver will always move exactly together. Consequently, there is a discrepancy between the value of the two metals as commodities (the market ratio) and the value artificially set upon them as money (the mint ratio). Every time the market ratio deviates from the mint ratio, either gold or silver is overvalued, and the overvalued money

drives the undervalued one out of circulation. Then either gold or silver will become the standard coin in fact, and the other metal will disappear from the monetary system.

It has been reasoned, however, that, if bimetallism could be established in all of the most important countries simultaneously, by international agreement, this difficulty would not arise. When one country attempts to maintain bimetallism alone, a large part of the undervalued metal flows to other countries where bimetallism is not maintained. If all countries had the system, however, this expulsion of the undervalued metal could not take place. The only avenue of escape for it would be to employ it in the arts. But as it was withdrawn from circulation and put to industrial use, the value of money would rise as a result of the decrease in the supply of it, while the value of the metal in the arts would fall because its quantity was increasing This would go on until the value of the metal in its two uses became equal. In this way the market ratio would adjust itself to the mint ratio, and a certain amount of both moneys would remain in circulation. It is argued that if such an international system could be maintained, the price level would be more stable, because the two metals would not be likely to change in value to the same extent at the same time. If either one moved up or down, its effect upon prices would be offset by the greater stability of the other. However, experience proves that if we had had bimetallism for the first few decades of the present century, our price level would have shown more extreme changes than it did, because the value of silver fluctuated much more than did gold, and its presence in the monetary system would have been a disturbing, not a stabilizing influence.

Somewhat similar is the suggestion that the various gold standard countries establish an international commission to buy up the gold mines of the world and control the output of gold so as to maintain price stability. Apart from the difficulty of getting concerted action on such a plan, there is the fact that gold is coming to play a less and less important part in monetary systems. Moreover, this plan is based on the assumption that the price level can be controlled by manipulation of the one item, M, in the equation of exchange. In view of the ups and downs to which bank credit (M′), and the velocity of circulation of money (V and V′) are subject, this is very doubtful. All things considered, this proposal does not offer much hope of success.

The Compensated Dollar Plan.—One of the most widely publicized suggestions for controlling the price level is the compensated dollar plan, advocated by the late Irving Fisher, of Yale University. Briefly, the proposal is to maintain a gold standard, with free coinage and free convertibility of money, but the gold dollar, instead of being fixed in weight, would be changed from month to month in accordance with an official index number. If the index showed that the price level was beginning to rise, the weight of the dollar

would be increased by a small amount, never exceeding one per cent. The gold reserves in the monetary system would then represent fewer dollars, and the government would retire the necessary number of gold certificates. This would reduce the number of dollars (M) in our bank reserves, and so would decrease (Fisher believed) the average volume of bank credit, thereby tending to bring the price level down again. If the index showed a slight decline of prices, the weight of gold in the dollar would be reduced. More gold certificates could then be circulated against the gold in the monetary reserves, thus increasing M in the equation of exchange, and tending to force prices up to their former level. Incipient changes in the price level would thus be checked before they had progressed very far. There are other details to the plan, but the essence of it is covered by this explanation. Its announced objective is a stable price level, but if the method of control would achieve that objective, it could also be used to achieve the objective of neutral money.

However, it seems very clear that the compensated dollar plan, by itself, could not accomplish its purpose. Like the proposal for the international control of gold, it exaggerates the importance of gold as a controlling factor in our monetary system. The price level depends not alone upon the quantity of specie, but upon the amount of bank credit and the velocity of circulation of money. The compensated dollar rests upon the invalid assumptions that velocity is an unimportant factor and that, inasmuch as credit is based upon and limited by available gold reserves, any change in the number of gold dollars must be reflected in a corresponding change in deposit money. This is certainly not true of short period fluctuations. Therefore, while the compensated dollar plan would *help* to control the price level—especially the gradual upward and downward movements which take place over long periods of time—it would have to be supplemented by additional measures designed to correct fluctuations in bank credit.

The Control of Bank Credit.—Some writers believe that the regulation of bank credit alone, if rightly exercised, would suffice to control the price level. The banking system of most countries is dominated by some central banking authority, such as the Board of Governors of our Federal Reserve System. Among the devices at the disposal of such authorities are control of the rediscount rate, of open market operations, and of reserve requirements. Suppose that it is desired to check an incipient rise in the price level. The banking authorities can raise the rate of rediscount at which central banks will make loans to other banks, thereby discouraging credit expansion; they can sell securities in the open market and hoard the funds received in payment therefor, thus causing some shrinkage of the monetary circulation; and they can raise the reserve requirements to which the banks must conform, thereby limiting their lending power. If an incipient fall of prices is to be forestalled, they can lower the rediscount rate, thus making loans cheaper to borrowers; they can inject funds into the market by purchas-

ing securities and paying cash therefor; and they can lower the reserve requirements, thus relaxing the limits to bank credit expansion. The same controls could be used to keep the flow of money approximately constant, in accordance with the neutral money principle. All three of these devices are now in use in this country, but the authorities have not directed their controls resolutely toward stabilizing the level of prices or money incomes.

The critics who are opposed to price level stabilization or neutral money programs doubt whether the devices of credit control could be used effectively for such purposes. They argue that credit is an intangible thing, so dependent on the temper of the business community and on international monetary movements which are difficult to control, that it would not respond to regulation. As to this, it seems fairly certain that the banking authorities can check an inflationary rise of prices if they are resolved to do so, for they can make the expansion of credit extremely difficult. Their failure to do so in the past has been due to lack of willingness rather than to lack of power. It is not so certain that they can prevent prices from falling, for, while they can make credit easy and cheap to obtain, they cannot compel businessmen to borrow if they are not in a mood for it. However, it is always possible for the government to step into the breach with new issues of paper money and, if necessary, with a policy of borrowing and spending for public works. Such policies are sure to prevent prices from falling, if resolutely pursued.

More effective than any of the means of credit control now in use would be the one hundred per cent bank reserve plan, to be described in the following chapter. This would take the power to expand and contract bank deposits entirely away from the commercial banks and lodge it with the government. The volume of all kinds of money could then be definitely determined by the government and directed either toward the goal of stable prices or of money neutrality. While velocity of circulation would still be subject to independent variation, changes in it could certainly be offset by changes in the supply of money, if of sufficient magnitude.

The Suggested Abandonment of the Gold Standard.—The monetary system which now prevails in the United States, and in most other countries as well, appears to be in transition from a commodity currency, automatically regulated by its basis in the commodity selected as the standard, to a purely nominal currency, regulated by the government, with stability or neutrality as the objective of such regulation. The standard commodity is gold in most cases. In a true gold standard monetary system, there is free (unlimited) coinage of gold and convertibility of all other forms of money (including demand deposits) into gold at the will of the holder; hence the total quantity of money, on the average, tends to vary with its gold basis, expanding as the base expands, and contracting as the gold reserves contract. This kind of a monetary system does not exist anywhere in the world today. Where (as in

the United States) a quasi-gold standard has been retained, it is no longer automatic. A somewhat crudely managed monetary system has been superimposed upon it. In many countries there is scarcely a pretense of the gold standard. There need be no regrets at this evolution, for there are good reasons for believing that a gold standard is neither necessary nor desirable

It is granted that the gold standard has its advantages. In early times, when only metallic money was generally used, gold was the most suitable metal for the purpose. History shows that it gave us a more stable money than silver would have done, and it is far superior to fiat money when the latter is issued indiscriminately to meet the exigencies of political expediency The general use of gold in most of the world caused the price levels in all gold standard countries to move approximately in unison, which is an advantage in international trade. Also, gold shipments afford a very satisfactory way of settling international balances Finally, where there is a strong enough sentiment for maintaining the gold standard inviolate, industry is protected from inflationists and "cheap money" politics.

On the other hand, gold has little actual use as money today. It has been almost completely replaced by paper notes, the gold merely being kept as a reserve to secure the paper. In many countries the paper is inconvertible, or (as in this country since 1933) convertible only under narrowly limited conditions Where the circulating medium is regulated by the size of the gold reserves, the consequences may be far from satisfactory. An inflow of gold may lead to dangerous inflation. This happened when Europe sent us great quantities of gold to pay for purchases here during and after the First World War Our surplus reserves of gold helped to support the rapid rise of prices which reached its peak in 1920, and led to an eventual collapse. Conversely, an outflow of gold payments may cause deflation and loss of confidence. This was the experience of some European countries in the period between the two world wars. Moreover, it is expensive to keep millions invested in gold just to lie in storage. Finally, the relatively stable value of gold in the past is largely accidental. Gold production ran roughly parallel to the output of other commodities, keeping the ratio of money to trade (the numerator and denominator of the equation of exchange) fairly constant, but there is no assurance that even this rough stability will continue. Some students of the problem believe that there is little likelihood of much further steady increase in the world's output of gold, while continued growth of production in other lines is to be expected The rigid maintenance of a gold standard under these conditions might lead to a long period of falling prices, with a depressing effect upon business. On the other hand, if science should discover ways of transmuting other metals into gold cheaply, there might be a sudden increase in the world's supply which would usher in a period of inflation Finally, one may ask why it is necessary or appropriate to tie our monetary system to any one commodity whose value is bound to

fluctuate. Even though we may correct such fluctuations by compensated dollars or other devices, would it not be better to tackle the problem directly by setting up a new monetary unit whose value is independent of any one commodity? This is what some writers are now proposing.

The Multiple Commodity Reserve Plan.—One proposal would replace the gold standard with a multiple commodity standard. The idea is that a dollar would represent a composite group of some twenty-five or more basic, storable raw commodities. The relative amounts of these commodities in the group would be determined by their relative importance in commerce. A dollar would be equivalent to a fractional part of the representative group, and would be redeemable in quantities of sufficient size to make the operation a practicable one—for instance, in sums of, say, one hundred dollars. Thus a dollar would be in effect a multiple commodity certificate similar to the gold certificates that are now the basic units of our monetary system. The certificates would be issued against quantities of the composite group of commodities stored in warehouses under government seal. These commodities would thus constitute a one hundred per cent reserve back of the money Anyone could obtain dollars by bringing these commodities to the warehouses for storage, or the holder of money could redeem it by surrendering dollars for the commodities and taking them out of storage. He would have to take all the commodities in the group; he could not take possession of any one commodity separately.

The advocates of this proposal believe that it would stabilize the general level of prices because the representative group of commodities selected for the reserve could never depart appreciably from one dollar in price. If their prices should start to go down, the dollar would become worth more than the group of commodities; therefore, holders of commodities would bring them to the government for storage in exchange for more dollars. This would reduce the quantity of the commodities offered for sale on the market at the same time that it increased the number of dollars in circulation, with the result that prices would rise. If the prices of the group of commodities should go above a dollar, people would exchange dollars for commodities by taking the latter out of storage. This would bring prices down again because the supplies of the commodities offered on the market would increase and the number of dollars in circulation would be reduced.

It will be noticed that this plan is very similar to the proposal, described in the preceding chapter, to stabilize business activity by having the government purchase and sell standard storable commodities, through the medium of a Federal Reserve Corporation. It has, indeed, been suggested that the two ideas could be worked together to stabilize both prices and business activity.

Two principal objections can be made against this plan. In the first place, it could stabilize only a small group of prices—namely, the wholesale prices

of a few selected commodities—while the general price level is made up of a vast complex of prices. The prices of other commodities not included in the reserve—thousands of finished consumable goods sold in retail markets, securities, real estate, rented houses, the wages of labor—all these make up the price level, and they do not move in exact correspondence with any selected group of wholesale commodity prices. Therefore, the proposed scheme could only introduce one stabilizing element into the multiplicity of prices, and this could hardly be sufficient to prevent the price level as a whole from fluctuating. In the second place, the proposed machinery is complicated and clumsy. It would be awkward to have to handle a score or more of commodities in fixed proportions every time new dollars were to be issued or old ones redeemed. The plan calls for an extensive system of warehouses under government supervision, and these warehouses would be difficult and expensive to operate. No such complicated machinery is necessary because we do not have to have any reserve back of our money at all. A sound and stable monetary system can be maintained without any reserve by simply regulating the number of dollars according to an appropriate criterion, such as is afforded by the neutral money idea. Let us see how this could be done.

A Managed Nominal Money.—Trade can be carried on quite satisfactorily by the use of nominal monetary units, provided their quantity is intelligently controlled. The real danger in the use of inconvertible paper or any nominal money lies, not in the fact that it cannot be redeemed for gold or other standard commodities, but in the possibility of overissue. If paper and deposit money, without any commodity backing, were issued in quantities no more than sufficient to keep money neutral, there is no reason to believe that the monetary system would collapse or that inflation would occur. In fact, there have been countries where inconvertible paper or overvalued silver money has served as a satisfactory medium of exchange and provided a fairly stable level of prices for considerable periods of time. It seems, therefore, that the time has come to adopt an honestly and wisely managed nominal currency.

Working out such a monetary system would involve the creation of a fund of paper money and bank deposits, the quantity of both of which would be strictly limited by the central monetary authority. The paper money would be inconvertible and without any commodity reserve behind it, but it would be issued only in quantities sufficient to insure the neutrality of money, or to maintain stability of the price level. Such a currency would differ from paper issues of the past in that it would not be even nominally a promise to pay gold and it would not be issued for purposes of securing government revenue, but solely to provide a medium of exchange. It would differ also in that its quantity would be definitely fixed by the criteria stated. In so far as gold was needed for the settlement of international balances

arising out of foreign exchange transactions, the need could be met by a special fund provided for that purpose by the government. To a certain extent, this last is in effect in the United States today. Our government no longer converts money freely into gold, but will convert it where the gold is wanted to pay debts abroad. However, even this limited monetization of gold would really not be necessary, for if the yellow metal were sold freely in the markets like any other commodity, anyone needing it to make a payment abroad could obtain it by a simple act of purchase.

Provided such a monetary system were competently administered, it should be greatly superior to the present system. Its greatest danger would be that a weak government might use it as a source of revenue, thereby ushering in a period of fiat money inflation, with all its attendant evils. Yet even a gold standard system is not free from this possibility, for specie payments can be (and often are) suspended in the exigencies of government finance. Any monetary system can be (and probably will be) abused when war occurs. In peacetimes, however, it is entirely possible to set up a managed monetary system that will be free from political tampering. All that is necessary is to create an independent monetary commission with positive instructions to employ a certain type of index number and to regulate the quantity of money in a definitely prescribed way to achieve a clearly stated objective. Further developments in monetary policy are likely to be in this direction.

Summary

The general level of prices is subject to fluctuations which can be measured by index numbers Changes in the level not only aggravate the evils of general economic fluctuations, but they have profoundly disturbing effects upon debtors, creditors, wage earners, and business enterprisers. However, there is no disturbance when a decline in prices is due solely to reduced real costs of production. The evils of rising prices are most catastrophic in periods of extreme monetary inflation. Subsequent deflation is almost equally disastrous. Where inflation has been excessive, stability can only be restored by repudiation or devaluation of the overissued currency and the establishment of a new, stabilized monetary unit.

To remedy the evils of a fluctuating price level, it is proposed that the price level be stabilized by some kind of monetary control. A better proposal is to stabilize the average money incomes of productive agents, thereby making money neutral This would allow prices to fall slowly as real costs are reduced by technological progress. Critics of all such stabilization proposals argue that foreign exchange rates would be upset, that interprice relations would be disturbed, that suitable index numbers to guide the controls are not available, that devices suggested for the control of money would prove inadequate, and that the program would be interfered with by

politics. Many competent students of the problem believe that these difficulties are not insuperable.

This chapter considered several proposals of control. A multiple standard of debts would correct the injustices between debtors and creditors, but it would not go to the root of the problem. International bimetallism and international control of gold production would probably fail, because they would control only the item M in the equation of exchange. The compensated dollar plan, according to which the weight of the dollar would be varied directly with movements of the price level, would be inadequate by itself, for the same reason. To be effective, the program must include the control of bank credit by means to be developed more fully in the next chapter. A multiple commodity reserve monetary system is needlessly complicated, and would be only partially effective. What is needed is the final abandonment of the already moribund gold standard and the establishment, in its place, of a managed nominal money consisting of inconvertible paper and bank credit, definitely regulated so as to maintain a stable (or neutral) price level.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

Irving Fisher's *The Purchasing Power of Money* (1911) is a classic exposition of the theory of price level fluctuations. His ideas are more briefly stated in Chapters VIII to XII of his *Elementary Principles of Economics* (1910). A more modern treatment of the same theme is contained in Lester V. Chandler's *An Introduction to Monetary Theory* (1940).

J. S. Lawrence's *The Stabilization of Prices* (1923) surveys the whole problem of price stabilization, pointing out especially the difficulties involved. Alvin H. Hansen deals with some of these problems in his *Economic Stabilization in an Unbalanced World* (1932), especially in Part IV. F. A. Hayek gives a theoretical argument against price stabilization in his *Prices and Production* (London, 1931). Irving Fisher argues forcefully on the other side, and supports the compensated dollar plan, in his *Stabilizing the Dollar* (1920). Lauchlin Currie also advocates a program of strict monetary control in his *The Supply and Control of Money in the United States* (1934). J. M. Keynes considers some of the monetary problems of the period between the two world wars, and advocates the substitution of a managed nominal currency for the gold standard, in his *Monetary Reform* (1924). For an explanation of the multiple commodity reserve plan, see Benjamin Graham, *Storage and Stability—a Modern Ever-Normal Granary* (1937).

A series of papers on the pure theory of the value of money, with some consideration of the problems involved in trying to stabilize it, is to be found in the *Supplement* to the *American Economic Review*, May 1947, pages 299-334. On the concept of neutral money and its relation to price level stabilization, see Chapter 10 of George N. Halm's *Monetary Theory* (1942).

CHAPTER XV

The Control of Banking

A. Banking Functions and the Objectives of Control

Bank Regulation.—The last two chapters have shown the intimate connection that exists between bank operations, economic fluctuations, and movements of the price level. The whole process of economic life is so dependent on the banks that the maintenance of a satisfactory banking system is essential to prosperity and stability. Experience over a long period of years, both in this country and elsewhere, has shown that the banking system will not function satisfactorily without some supervision by government; hence measures of regulation have been adopted in practically all countries. In the United States, regulation was first left to the several states to handle, but serious abuses forced the federal government to intervene with the National Banking Act in 1863 and, in 1913, with the creation of the Federal Reserve System. Today, although thousands of state banks still exist, most of them are subject to some degree of federal regulation, either by virtue of their voluntary membership in the Federal Reserve System or through their affiliation with the Federal Deposit Insurance Corporation. Therefore, we now have a wide degree of federal control over most of the nation's banks.

The machinery developed to exercise this control, and the way it has been used, have been shaped by the basic concepts that have dominated American thinking on the nature and functions of banks. If we would get an insight into the problems of control, therefore, we must understand these concepts. This requires us to apprehend the two primary functions which banks perform in our economy, as the rather discouraging results that have so far attended our efforts to provide a satisfactory banking system can be attributed in large measure to the fact that the full significance of these two functions has been only dimly appreciated.

The Two Primary Functions of Banks.—The roundabout (time-consuming) process of production that characterizes modern industry depends upon invested savings to provide it with equipment. Governments also need such savings to finance some of their more costly undertakings, especially wars. One primary function performed by banks is to act as go-betweens in collecting the savings of individuals and making them available to industrial enterprises and governments. This may be called the loan function. It is seen most clearly in savings and investment banks. Thousands of small

investors deposit in savings banks the monetary savings which they accumulate in modest amounts from time to time. The savings banks lend these accumulations to business corporations and governmental units by investing them in industrial or government bonds and mortgages. Out of the interest earned on these investments the banks are able to meet their own expenses and pay a smaller rate of interest to their depositors. Investment banks perform the loan function somewhat differently. They underwrite large security issues for business corporations (as explained in Chapter IV), thus guaranteeing their sale. They then proceed to market the securities to large investors who come to them for advice on the investment of their savings. It is important to notice that in these two cases the funds invested come from individuals who save them out of surplus income.

The second primary function of banks is to provide the community with a medium of exchange—that is, money. This function is performed by commercial banks. Originally the principal form of money supplied by the banks was the bank note. This is still widely used in some countries, but in the United States such notes are now issued only by the Federal Reserve Banks. Far more important in our banking system are demand deposits (checking accounts). It is important to realize that these are really a form of money. They act as money in the following way: Suppose a depositor, A, has purchased goods from a seller, B, to the amount of $1,000. A draws a check to the order of B, which B deposits in his bank. The amount of $1,000 is then deducted from A's balance and added to that of B. If both men deal with the same bank, this is accomplished by a simple transfer on the books of that institution. If they deal in different banks, it is accomplished through the mechanism of the clearing house, or perhaps by a shifting of balances to the credit of the two banks in the Federal Reserve bank of their district. In any case, it takes the form of changes in the entries to the credit of the two men in their respective institutions. By means of these changing credit balances, deposits "circulate" from person to person, without much use of cash. Fully nine-tenths of business payments in this country are made in this way. Deposits have come to supplant other forms of money for large transactions because they are safer and more convenient.

These are not the only functions performed by banks. They also act as custodians for the safe keeping of funds, and sometimes as fiduciary agents to look after decedents' estates and to handle the investment of funds left in trust for various beneficiaries, but these functions are minor. It is with the loan and monetary functions that the principal problems of bank regulation are concerned.

Mixture of the Two Functions in Commercial Banking.—If commercial banks existed solely for the performance of the monetary function, and had nothing to do with loan operations, many of the problems that have plagued our monetary and banking systems might never have arisen. How-

ever, the fact is that these banks perform both kinds of function, and the two things are combined simultaneously in their daily business operations. When a commercial bank makes a loan, it does not necessarily act (like a savings bank) as an agent for transferring to borrowers funds previously placed in its custody by depositors, or derived from the initial investment of its stockholders. It has the power to create the money it lends in the very act of lending. For instance, when a borrower brings a note to his bank for discounting, the bank does not usually give him cash, it merely credits his account with a deposit to the amount of the note, less the discount. He can then draw checks against this deposit and use the credit so placed at his disposal to hire labor or purchase goods in his daily business operations. When business is in a process of expansion, during the upward phase of a cycle, a large volume of new deposit money is being created in this way. This is known as bank credit expansion. During a recession, on the other hand, when loans are being paid off, deposits are being liquidated, so that bank credit is undergoing a process of contraction. As a result of these operations, the supply of money in the community is being alternately increased and decreased.

This process of creating and extinguishing deposits upsets the balance between saving and investment in the economy, leading to serious difficulties. When bank credit is being newly created, the new funds flow mainly into investment, without the volition of income recipients. This causes involuntary saving, and may bring on a general depression, in the manner described by the monetary overinvestment theory of business cycles. On the other hand, when credit is being liquidated investment is forcibly reduced, again independently of the actions of income recipients. It thus tends to distort the balance of industry in the opposite direction. In both cases the connection between voluntary saving and investment is destroyed. Aside from these distortions, the expansion and contraction of credit tend to inflate and deflate the price level, with the unfortunate results that were described in the preceding chapter.

Two Schools of Thought Concerning Bank Regulation.—The existence of two different primary functions in commercial banking has led to a division of economists into two corresponding schools of thought concerning the purposes of bank regulation. One group, known as the *commercial banking school,* emphasizes the loan function. Its adherents believe that the object of bank regulation should be to make loans responsive to the needs of business, with adequate safeguards for bank solvency. Therefore, they stress safety, elasticity, and liquidity as the proper criteria for bank regulation. They are willing to see the quantity of bank credit fluctuate, but they would set up qualitative controls to protect the banks against failure. The other group, which is known as the *monetary school,* stresses the monetary function. Its members believe that the object of bank regulation should be to

control the volume of bank credit in such a way as to promote business stability. While they do not minimize the importance of quality, they would place the major emphasis on quantity in order to forestall the disturbing effects of monetary inflation and deflation.

Since the second school is of fairly recent development, it is the first school that has hitherto dominated our legislative and administrative bank policy. The second, however, appears destined to exert increasing influence in the future, and therein lies our real hope for a more satisfactory banking system—one that will contribute to stabilization of prices and the smoothing out of economic fluctuations. Accordingly, we may divide the balance of this chapter into two parts, the first of which will describe the existing machinery and procedure for the attainment of security, elasticity, and liquidity, while the second will present a plan for separating the loan and monetary functions and for tying the banking system in with the program of stabilization outlined in the two preceding chapters.

B. The Existing Machinery and Procedure of Control

The Need for Safety.—We have seen that bank deposits (and to some extent bank notes) constitute the bulk of the medium of exchange in our economy. Since both of these are forms of credit, representing promises by the bank to redeem them in standard money on demand, their validity depends on the ability of the banks to fulfill these promises. If a particular bank becomes insolvent, the people who hold its deposits (or notes) are likely to lose part or all of these claims, and they may be reduced to severe straits by this loss. If, for any reason, the public becomes distrustful of the banks and is unwilling to accept bank credit as a medium of exchange, both the banks and the business world become paralyzed. In our monetary system the total quantity of standard money is only a small proportion of the total amount of bank credit and, therefore, the banks are unable to redeem their promises if all of them are called upon to do so at the same time. Such a call is likely to come in times of severe business crisis. Then there may ensue the condition of panic that was mentioned in Chapter XIII. Everyone is scrambling for cash which is not to be had. Banks are forced to close their doors, and it is very difficult to carry on business because money is not available for payments.

In the panic of 1933, the unsound condition of certain banks in the state of Michigan led to such general distrust of our financial institutions throughout the country that depositors began to make heavy withdrawals of cash, which would soon have exhausted our banking reserves. To avert a national catastrophe, the President declared a banking holiday for several days, during which all national banks throughout the country were closed. Most state authorities took similar action. At a special session of Congress emergency

banking legislation was prepared, under which only sound banks were permitted to reopen, while conservators were appointed to conserve the assets of such institutions as were not deemed ready to resume normal operation. An ample supply of cash was made available by liberalizing the provisions under which Federal Reserve notes might be issued. Even so, in many cities emergency currency had to be issued, in the form of clearing house certificates, commonly known as "scrip," which were paper money backed by all the assets of banks which were members of the clearing house. This illustrates the kind of situation that arises when the fragile structure of bank credit collapses, and it demonstrates the importance of preventing it.

Controls Directed Toward Safety.—There are five types of controls in this country intended to preserve the integrity of bank credit or to reimburse the holders of deposits against loss if individual banks fail. These controls can be classified as : (1) those relating to bank capitalization and examinations; (2) those relating to note issues; (3) those relating to deposit reserves; (4) those relating to speculative loans; and (5) the insurance of bank deposits. These can be briefly described as follows:

The National Bank Act of 1863 (with subsequent amendments) requires that national banks must have a minimum capital of not less than $25,000 in small towns and $200,000 in cities of over 50,000 population. Besides this, they must set aside one-tenth of their annual profits until a surplus equal to at least twenty per cent of their original capital has been accumulated. These provisions are intended to prevent the establishment of very small banks with inadequate resources. National banks must also make periodic reports of their condition to the Comptroller of the Currency and they must submit to thorough examination of their books by members of his staff at least twice a year. The states have similar laws, varying in strictness, for banks which are chartered under their egis, and most of the state banks now come under a considerable measure of federal supervision if they elect to join either the Federal Reserve System or the Federal Deposit Insurance Corporation. While these measures provide some protection for depositors, they do not, of course, prevent bank failures caused by faulty management or unwise investments.

Safety of note issues has been effectively provided by giving a monopoly of this form of bank credit to the Federal Reserve banks. State bank note issues (which had been much abused in the past) were done away with when the National Banking System was established, by means of a prohibitive federal tax of ten per cent which made their issuance unprofitable. For many years thereafter national banks were permitted to issue notes under certain conditions which guaranteed their redemption, but beginning in 1935 these notes were gradually retired, so that they are no longer in existence. A small quantity of Federal Reserve bank notes, issued under similar conditions, has been put into circulation from time to time, but they are an

insignificant part of our money supply. Their safety is assured by government bonds held by the Treasury as security for their redemption. The only important form of bank note that we now have is the Federal Reserve note, which is issued only by Federal Reserve banks Holders of these notes are protected against loss because they are obligations of the United States government, which has ample resources to safeguard them; and they are secured by a 100 per cent reserve, not less than 25 per cent of which must be in gold certificates (which are in turn secured dollar for dollar by an equal value of gold), and the balance either in rediscounted commercial paper or (since the Second World War) in federal government securities. These safeguards are quite adequate, so that there has never been any question about the safety of the Federal Reserve notes

An effort has been made to provide some security for bank deposits by requiring all member banks in the Federal Reserve System to maintain reserves in the form of deposits with the Federal Reserve banks of their respective districts The minimum reserves required can be varied within certain limits by the Federal Reserve Board,[1] the range of variation being 13 to 26 per cent in New York and Chicago (known as "central reserve cities"), 10 to 20 per cent in other large ("reserve") cities, and 7 to 14 per cent in smaller towns Although, like any other demand deposits, these reserves are merely sums credited to the accounts of member banks on the books of the Federal Reserve banks, the latter are bound to honor them in cash if called for. They can do this by issuing Federal Reserve notes, in the manner described above. As a further safeguard, they must keep a reserve against their deposits of (since 1945) not less than 25 per cent in gold certificates, but since these certificates are not permitted to circulate, this reserve is not practically usable. On the basis of this reserve there is pyramided a structure of Federal Reserve bank deposits several times its size, and a superstructure of member bank deposits several times greater yet. In spite of the reserves, the fundamental fact remains that the deposits represent obligations payable in cash, and the foundation of cash is only a small fraction of the deposits. The supposed security is, therefore, largely fictitious, and it leaves the system of deposit banking very vulnerable to any occurrence (such as a business crisis) that weakens the confidence of the business world in the soundness of bank credit.

One threat to the safety of our banks has been their tendency to lend funds to borrowers who use them for speculation of the gambling type, particularly in the stock market. Such loans are likely to be made in large volume when prices are rising, for it is then that profits are to be made from speculation Subsequently, when the banking situation gets critical, the loans are terminated and borrowers are forced to dump their speculative holdings on the market at sacrifice prices in order to pay the banks Business

[1] Technically this body is now termed the Board of Governors, but we shall call it the Federal Reserve Board because it commonly goes by that name

crises are commonly precipitated in this way, and some banks are likely to get caught in the collapse of the securities which they hold as collateral for loans. The business of margin trading, which was described in Chapter IV, is the worst feature of this speculative lending. In order to provide some check over loans of this type, the Federal Reserve banks since 1933 have been directed to consider the amount of loans granted by member banks for speculation in securities, real estate, or commodities, in determining whether further Federal Reserve credit should be allowed them. The intention is to deny rediscounting to banks which are lending too much for speculation. The effectiveness of this control is dependent on the extent to which member banks must come to the Federal Reserve banks for credit. It is almost entirely ineffective today, when member banks are in possession of huge quantities of government securities with which they can obtain all the Federal Reserve credit they need simply by selling them to the Federal Reserve banks. Much more effective are the powers which the Federal Reserve Board now has to control margin requirements. As mentioned in Chapter IV, it can fix the percentage of margin which member banks must require on loans for stock speculation, and brokers loans can be made only by banks that are members of the Federal Reserve System or that have agreed to abide by their margin requirements. This power is being vigorously used. It should strengthen the ability of our banks to weather a storm of falling prices in the stock market.

Since 1933 individual depositors in national banks (and in nearly all state banks) have been insured against loss of their deposits, up to a maximum of $5,000 per depositor. The insurance is provided by the Federal Deposit Insurance Corporation. This corporation is possessed of a guarantee fund, derived initially from a federal appropriation and compulsory subscriptions from the Federal Reserve banks, and sustained by annual assessments against the participating banks. If a bank fails, the corporation takes charge and proceeds to liquidate it, making good the losses of its depositors, if necessary. Although somewhat similar systems of deposit insurance, previously tried in a number of states, were not successful, the federal plan is better conceived and has been better managed. It has so far been able to meet all the losses for which it was liable, and it bids fair to be a means of protecting innocent small investors against undeserved losses from bank failures.

Elasticity of Bank Credit.—If the loan function were completly separated from the monetary function, banks could supply to their borrowers only as much money as was entrusted to them for lending by their stockholders and depositors. In that case the supply of investible funds would depend on the willingness of income recipients to save and invest a part of their revenues. This supply would have some elasticity because it would be somewhat responsive to changes in the rate of interest offered for loans If there was an active demand in the loan market, interest would rise and, under this

inducement, more savings would be offered for investment. When demand was slack, interest would be low and the effective supply of loanable savings would shrink. At the same time interest would exert a selective influence on borrowers. Only those industrial projects which offered the prospect of sufficient gains to cover the rate of interest prevailing would be able to obtain funds. There would result from these influences a balance between demand and supply in the loan market, and investment would be directed into its most profitable channels.

Under the prevailing system, in which commercial banks can create the money they lend by merely crediting borrowers with deposits on their books, loans do not have to be restricted to voluntary savings, and the rate of interest is largely within the control of the banks. This gives much greater elasticity to the supply of investible funds, as increased investment in the economy can be financed by the simple process of bank credit expansion. On the other hand, this credit will contract of its own accord when loans are paid off, unless new loans are made as fast as old ones expire.

It is the theory of the commercial banking school that this creation of credit helps to promote economic activity and progress by making it easy for businessmen to obtain "working" (i.e. circulating) capital for current operations when demand for their products is active. The members of this school do not appear to be seriously concerned about the interference with the natural operation of demand and supply and with the mechanism of the interest rate that this credit creation occasions. Therefore, they hold that it should be a primary objective of bank regulation to facilitate elasticity of the credit supply. This was one of the dominant purposes for which the Federal Reserve System was established in 1914

Automatic Elasticity in the Federal Reserve System.—The Federal Reserve System was supposed to provide an automatically elastic supply of bank credit through its machinery of rediscounting, of deposit reserves, and of Federal Reserve notes.

The rediscounting feature was supposed to work as follows: In a period of economic expansion, applications for commercial bank loans might exceed the capacity of member banks to grant them because of limited existing reserves. The member banks could then take certain high-grade types of commercial paper to the Federal Reserve banks and have it rediscounted, thereby increasing their deposits in these banks. These additions to Federal Reserve bank deposits would constitute increases in the legal reserves of the member banks, and on the basis of these increases, they could grant additional loans to their customers by an amount several times as great as the new reserves. Contraction would take place automatically when the demand for loans declined. As old loans were paid off, the rediscounted paper held by the Federal Reserve banks would be liquidated, and member bank deposits in the Federal Reserve banks would be correspondingly reduced. This

reduction in their legal reserves would decrease their own capacity for making loans, and the whole structure of credit would shrink. Thus the rediscounting process was expected to give great elasticity to bank deposits, according to the state of demand in the business world.

When the volume of bank deposits expands there will almost certainly be an increased demand for cash, because depositors usually need to convert a proportionate amount of their deposits into cash for the payment of wages and for small transactions where checks are not as convenient as pocket or till money To meet this need, the Federal Reserve System provided Federal Reserve notes The Federal Reserve banks could issue these notes in the process of rediscounting, the rediscounted paper being held as a one hundred per cent reserve behind them. So, when member banks expanded their lending capacity by rediscounting paper at the Federal Reserve banks, they could obtain Federal Reserve notes, instead of deposit credit, according to their needs When the rediscounted commercial paper was redeemed, the Federal Reserve notes issues against it had to be retired. In this way the Federal Reserve notes were made as elastic as deposits. However, the Federal Reserve banks could continue the Federal Reserve notes in circulation, if they chose, by holding reserves of one hundred per cent in gold certificates against them. Many Federal Reserve notes were allowed to circulate on this basis, and this part of the money supply was not elastic.

Control of Elasticity by the Federal Reserve Board.—In the machinery of elasticity there is a potential danger that was recognized by the framers of the Federal Reserve system So long as bank credit expands only in proportion to the increase in trade, so that $(MV+M'V')$ keeps in exact step with T in the equation of exchange, the price level will not be disturbed and there will be no serious monetary interference with business. However, there is always the risk that expansion of credit will become inflationary, thereby contributing to economic unbalance and leading eventually to a crisis. Likewise, a contraction of credit can become deflationary, having a depressing effect upon business. In an effort to provide against these disasters, the Federal Reserve Board has been provided with powers which it was hoped would be adequate to deal with such situations as might arise. The original Federal Reserve Act gave the Board power to control the rate of rediscount and to engage in open-market operations. In 1935 the power to control the minimum deposit reserves, within certain limits, was added.

By virtue of these powers, the Federal Reserve Board is supposed to be able to deal with a threatened credit inflation, as follows: If, in a period of business prosperity, a dangerously inflationary development of bank credit is observed, the Board can raise the rate of rediscount, sell certain types of securities in the open market, and increase the reserve requirements Raising the rate of rediscount is supposed to discourage borrowing by making loans more expensive to the borrowers. Selling securities in the open market is

supposed to reduce member bank balances in the Federal Reserve banks, because the purchasers of the securities have to pay for them by drawing checks against their deposits, to the order of the Federal Reserve banks. The latter deduct these checks from the balances of the member banks on their books. This shrinkage reduces the legal reserves of member banks and thereby restricts their power to extend credit to additional customers. Finally, by increasing the size of the minimum reserves which member banks are required to keep in their Federal Reserve banks, the Federal Reserve Board can at one stroke reduce the maximum amount of credit that member banks can extend on the basis of their existing legal reserves. There is no doubt that, prior to the Second World War, these powers were strong enough to check any inflationary boom, if the Federal Reserve Board would use them resolutely. They are no longer adequate today, for reasons which will be explained in a later paragraph.

In a period of deflationary depression, it was believed, the Board might stimulate a resumption of activity by using the above three powers in a reverse manner. It could reduce the rate of rediscount, thereby making loans more attractive to borrowers; it could buy securities in the open market, thereby putting into the possession of the sellers funds which would find their way into the member banks and become available for business operations; and it could reduce the minimum reserve requirements, thereby increasing the maximum amount of credit which member banks were permitted to extend. It is doubtful if these measures would ever be effective, however, because merely putting credit at the disposal of business men is not enough to induce them to borrow. They will not utilize the means thus made available unless they see the prospect of sufficient demand for their products to warrant an expansion of production. So long as the maladjustments that cause the depression are uncorrected, and the general atmosphere of pessimism persists, easy credit conditions in the loan market will not suffice to initiate a recovery. This judgement has been well confirmed by experience.

The Theory of Liquidity.—Commercial bank deposits represent obligations of the banks to pay their depositors in cash (and ordinarily in standard money), up to the full amount standing to their credit, if they demand it Yet the cash reserves available for such payments amount to only a fraction of the deposits. This lays the entire banking system open to disaster if depositors become anxious about the validity of their deposits and consequently attempt to convert them into cash. Then the delicate structure of credit collapses and there occurs a business panic. Depositors flock to the banks for cash which is not to be had, with the result that the banks are forced to close. Business operations are paralyzed, for no one will accept checks any more, and there is not enough cash to carry on the ordinary business of trade.

The commercial banking school would attempt to forestall such panics by keeping each bank in as liquid a condition as possible. *Liquid* means having the bulk of the bank's assets of a readily salable kind, so that they can quickly be exchanged for cash if more cash is needed Then if there is a change in the temper of the community, so that larger quantities of cash relative to deposits are being demanded, the bank can soon adjust themselves to this situation. [redacted] one or two banks become insolvent, involving the danger that depositors in other banks might become frightened, the banks of the community can check an incipient run by liquidating (i.e. selling) some of their assets, until they obtain cash enough to demonstrate their ability to meet the demands being made upon them. It is hoped by these measures to prevent the initial run from degenerating into a panic.

In accordance with these ideas, the commercial banking school considers it unwise for commercial banks to invest any great proportion of their credit in long-time loans. That should be left to investment banks, whose clients buy stocks and bonds instead of holding demand deposits, or to savings banks, whose depositors do not have the privilege of withdrawing their deposits in cash without prior notice. Commercial banks were, until recently, supposed to lend only for short terms (usually thirty, sixty, or ninety days), and particularly for such purposes as the buying of raw materials by manufacturers who would soon turn them into finished products, or for purchasing stocks of merchandise by wholesalers and retailers who would soon sell them to buyers, so that cash with which to repay the loans would be coming in to the borrowers. Loans secured by listed securities, pledged as collateral, were also regarded as very liquid because they could be sold on the stock market at a few hours' notice, it need be. On the other hand, it has generally been believed that commercial banks should avoid having a large proportion of their funds in such illiquid, or "frozen," assets as real estate or industrial plants, which are not quickly salable in ordinary circumstances.

There was one aspect of liquidity that was slow to be recognized. What appears to be a liquid asset for a particular bank may turn out to be nonliquid if large numbers of banks are trying to convert assets of the same kind into cash simultaneously. For instance, in periods of business prosperity many people borrow money for stock speculation, pledging the stock as collateral security for their loans. Often dealers encourage this by selling securities "on margin," where the buyer pays only a fractional part of the purchase price and the dealer supplies the rest, holding the stock as security. The dealers obtain funds for such sales by borrowing from the banks and repledging the collateral. When the speculative fever reaches its height, and stock prices begin to go down, the banks endeavor to protect themselves by selling the pledged securities on the stock market. This wave of selling aggravates the decline The result is that stock prices may fall so rapidly that what was thought to be adequate security turns out to be insufficient to

cover the loans. So, although there is always a market for the stock, its value may be insufficient to protect the banks against loss. Its liquidity is deceptive, because it cannot be made to yield enough cash to meet the situation. Similarly, a bank may make short-time loans secured by real estate. The bank may think of such a loan as fairly liquid because the borrower is under obligation to pay it off in cash after a short interval: but the liquidity will disappear if the banks generally have a large amount of such loans outstanding and something happens to impair the ability of the borrowers to make repayment. Then the real estate will prove to be very inadequate security to meet the exigencies of the moment, for it cannot be converted into cash immediately except by selling it at sacrifice prices which may not yield enough to cover the amounts loaned. These examples illustrate the difficulties of a banking system based upon deposits which obligate the banks to pay cash when demanded, when there is not, in fact, enough cash in existence to meet such obligations.

Provisions for Liquidity in Our Banking System.—To a large degree, liquidity of the assets of a particular bank depends on the character of its loans to its customers. If the bank ties up its assets in long-term loans or loans which, though nominally for short periods, are secured by types of collateral, such as real estate, that cannot easily be sold on short notice, its condition will be illiquid. Under existing arrangements, the Federal Reserve authorities have very little control over these matters. However, one step has been taken to break the connection between commercial bank credit and permanent investments. Since 1934, member banks in the Federal Reserve System have not been permitted to have any affiliations with investment banking institutions, and the latter are prohibited from engaging in commercial banking operations. Member banks are also prohibited from paying interest on demand deposits, a provision which, it is hoped, will discourage depositors from maintaining large cash balances in their checking accounts and will induce them to put their surplus funds into interest-bearing savings accounts or other permanent investments, in the usual way. However, these provisions cannot very well check the indirect use of commercial loans for investment in fixed capital by repeated renewals, or by accepting real estate and durable equipment as collateral security for loans which are only nominally of short-term character.

Prior to the Second World War, the machinery of rediscounting gave a certain amount of liquidity to member bank credit, to the extent that this credit was based on the high-grade types of commercial paper that were eligible for rediscounting. A member bank in need of additional cash could rediscount this paper with its Federal Reserve bank, obtaining Federal Reserve notes in exchange. The Federal Reserve banks, it will be recalled, were permitted to issue these notes up to the full amount of the rediscounted paper, provided they had the prescribed forty per cent reserve

of gold certificates. Since the war, private loans have become a very minor part of commercial bank business, most of their credit having been placed at the disposal of the federal government through purchase of various government securities. As a result, there is little or no rediscounting, but an equivalent procedure is available by which the banks can convert their assets into cash. In order to assure adequate financial resources to the government during the war, the Federal Reserve banks guaranteed to support the market for its securities. To make it possible for the banks to do this, wartime legislation gave them the privilege of issuing Federal Reserve notes against these securities. So, any member bank needing more cash can sell government securities to its Federal Reserve bank, obtaining Federal Reserve notes in exchange. This gives great liquidity to commercial bank credit, most of which is now based on government obligations.

C. Some Needed Reforms

The Unsatisfactory Performance of Our Banking System.—In spite of all these elaborate controls, our banking system has been far from satisfactory. It has provided neither the safety, nor the elasticity, nor the liquidity that were intended. As for safety, bank failures in this country have been excessive. In the decade from 1923 to 1932, inclusive, 9,883 banks failed in this country, with combined deposits of over four billion dollars. There were 4,000 failures in the single year 1933. While the number of failures among members of the Federal Reserve System has been less than those outside of it, there have been too many in both cases—far more than occur in other countries with strong central banking systems.

Instead of elasticity, which would keep the flow of money in approximate balance with the flow of trade, we have had successive inflations and deflations. This has been due partly to the exigencies of government finance in the two world wars. In each conflict the Federal Reserve Board permitted the Federal Reserve System to become a vehicle for the easy flotation of government bonds. In the first war the Federal Reserve banks made private loans very freely, using government bonds as collateral, and in the second they pledged themselves to support the government's financial program by buying all the government bonds that were offered to them. The result in both cases was a drastic inflation of credit. Even in the period of peace between the two wars, the Board permitted two periods of inflation to reach a point that led to collapses, the first in 1920, and the second in 1929. Both of these were followed by business depressions.

That the controls have not succeeded in achieving liquidity is demonstrated convincingly by the panic of 1933, which was described above. It will be recalled that it was accompanied by the closing of banks throughout the country because they were unable to meet the demands on them for

cash, and various expedients had to be resorted to, such as the issuance of clearing house certificates, in order to provide some kind of money for business transactions during the crisis. From all this it is obvious that the banking system has aggravated general economic fluctuations, instead of helping to promote stability.

Confusion of Functions a Basic Weakness.—One basic weakness which is at the root of this unsatisfactory performance lies in the confusion of loan and monetary functions which was described earlier in this chapter. The making of loans to finance the acquisition of capital equipment is one thing, and the providing of money for carrying on the operations of exchange is quite another. There is no logical reason why they should be combined in the same operation. They are so combined in present commercial banking practice by a historical accident, which grew out of the fact that orders for transfer of title to deposits of cash placed in the banks for safe keeping came to circulate in place of cash itself. Then, when they found that they were not usually called upon to produce the cash, the banks began to make loans in excess of their cash holdings. This practice will continue to be a potential source of trouble until it is abolished; for, as long as bank deposits constitute obligations which are payable in cash upon demand, and as long as they are tied up in loans which involve a certain element of risk, there will always be the possibility that circumstances may arise in which confidence in the integrity of the banks may be shaken, causing depositors to demand cash which is not to be had. Moreover, as long as the volume of deposit money is dependent upon the volume of bank loans, the quantity of money will be subject to fluctuations which disturb the operations of exchange.

There is another aspect to this problem. The national government is the most suitable agency to issue money and to control its amount, but the growth of deposit banking has permitted the banks to arrogate this function very largely to themselves, because about nine-tenths of our money consists of bank credit which develops out of the lending process. If the control of the money supply is to be exercised by the government, the power of the banks to create deposit money must be brought to an end.

Confusion of Public With Private Banking.—Another confusion that has developed in our banking system is the partial appropriation by the government of the business of lending funds to private borrowers—a business that was formerly considered to be solely within the province of private banking. During the depression of the 1930's, the government set up a number of institutions to help distressed debtors by making loans to them. Among these institutions were the Reconstruction Finance Corporation, the Home Owners Loan Corporation, the Farm Credit Administration, the Commodity Credit Corporation, and others. Most of these agencies are still functioning. The funds for their lending operations were obtained mainly by the sale of government bonds, partly to the general public and partly to the banks.

In the meantime something else was happening to the banks that fitted in with the above development. The demand for loans by private borrowers was falling off, due partly to the fact that an increasing number of business concerns were adopting the practice of meeting their needs for circulating capital out of their own financial resources, and partly to the temporarily depressed condition of industry. To make up for this loss of market for their credit, the banks turned to government securities, especially short-term Treasury bills. While the profit on such business was lower than that to be derived from private loans (because the government borrows at very low rates of interest), it was better than nothing. This trend toward the holding of government paper by the commercial banks was tremendously magnified in the Second World War, when the government secured enormous loans from the banks. Today a very large part of our government debt is held by the banks, and their business with private borrowers is minor in comparison.

Consider now the anomalous situation that exists in our banking system. The function of issuing money, which for generations has been considered the prerogative of the state or sovereign, has been largely usurped by the banks through the growth of the practice of creating deposits. On the other hand, the function of making loans to business concerns, which has historically been a function of private banking, has in this country been partly usurped by the government. This is a direct inversion of traditional and logical arrangements. It may be that we are in the midst of an evolutionary process by which the business of banking is gradually being socialized. If so, the culmination of this process will be in government ownership and operation of banks. There may be something to be said for this development. It is in line with the trend toward public ownership in other fields. But if the banks are to remain in private hands, then it would seem appropriate for the government to discontinue the custom of lending credit to business and let the banks perform this function. In any case, the business of creating money should be taken away from banks, either public or private, and lodged with a special agency of the government created specifically for that purpose, and completely divorced from loan operations.

Loss of Control Over the Credit Market.—The necessity for a drastic change in prevailing bank arrangements is further shown by the fact that the Federal Reserve authorities no longer have any effective means of controlling credit. This is due to the changes that have been made in the relationships between member banks and Federal Reserve banks by the methods of financing the government employed in the Second World War. In order to assure the government adequate financial resources with which to carry on the conflict, the Federal Reserve Board guaranteed to support the market for government securities. This meant that commercial banks could buy such securities freely with assurance that they could resell to the Federal Reserve banks if they so desired. By such sales they could always increase

their deposits (and hence their reserves) in the Federal Reserve banks, or they could obtain cash in the form of Federal Reserve notes.

We have already seen that the situation which has developed from this is one in which private business loans are an insignificant part of commercial banking operations, the overwhelming bulk of commercial bank assets consisting of government obligations. Since there is little or no rediscounting, the rediscount rate is no longer an effective instrument of control. Open-market operations are likewise ineffective, because the Federal Reserve banks have agreed to buy as many government securities as are offered to them; they dare not try to restrict credit by selling, instead of buying, them. And the control over reserve requirements is an equally impotent weapon because, as long as the member banks continue to own government paper which is salable to the Federal Reserve banks, the former can increase their reserves at will by compelling the latter to buy it. All this boils down to the fact that commercial banking in this country today is an instrument of government finance, and the volume of bank credit is entirely dependent upon the government's fiscal policy. Because of the enormous volume of government debt held by the banks, it will probably be a long time before private loans can again become the predominant business of banking, unless fundamental reforms are made.

The One Hundred Per Cent Reserve Plan.—The argument of the last three paragraphs leads to the conclusion that what our banking system now needs is a complete separation of the loan and monetary functions, a withdrawal of government from the business of private lending, and a fiscal policy that will support these changes. The first two objectives can most readily be obtained by a simple, constructive proposal, known as the one hundred per cent reserve plan. This plan proposes to divide commercial banks into two institutions—deposit banks and loan banks. These might be two different departments of the same institution (a checking department and a loan department), but the business of these two departments must be definitely and entirely separated. Deposit banks (or the checking departments of commercial banks) would cease to be agencies for making loans, but would continue as institutions for the safe keeping of funds and the convenience of making payments by checks. They would derive income from this business by charging customers for the service rendered, just as many banks now do in the case of small checking accounts. The banks would be required to keep reserves amounting to one hundred per cent of their deposits, instead of the fractional reserves they now hold. This would provide absolute safety for bank depositors. Collapse of the banking system would no longer be possible. Panics, with their shortage of money, would be a thing of the past.

To provide the necessary money for these reserves, the federal government could create a monetary authority with power to issue paper money (or merely to issue deposit credit in the Federal Reserve banks) in an amount

sufficient to make existing bank reserves equal to the volume of outstanding deposits. The money or credit so issued would become the property of the member banks through the purchase by the monetary authority of bonds, notes, or other assets which the banks now own. Or, the authority might use the money it issues to buy outstanding United States government bonds, the greater part of which are now held by the banks. The effect of this would be to replace the bonds by paper money or deposit credit which would bear no interest, thus saving the government the cost of interest on a large part of its existing debt. In one or the other of these ways the banks would sell assets which they now own to the government and would thereby come into possession of reserves sufficient to cover their deposits in full. They would be required to maintain one hundred per cent reserves in their checking departments thereafter. The quantity of money in the country, including the all-important deposit money, would thenceforth be definitely under the control of the federal government. Thus, for the first time, it would have positive machinery for a policy of intelligent monetary management.

With this plan in effect, the making of loans would be handled by savings banks, or by the loan departments of commercial banks, which would function in the same way as savings banks now do. Banks would lend only such funds as were invested in them by their stock and bondholders or were deposited by their patrons in savings accounts. When a bank had once loaned all the funds at its disposal from these sources, there could be no further expansion. New loans could be made only as old loans were paid off or as new deposits resulted from the savings of depositors.

With the adoption of this system, no agency of government other than the monetary authority should have power to change the quantity of money. Neither the President nor the Secretary of the Treasury should be permitted to issue government notes, change the gold content of the dollar, or otherwise tamper with the currency. The monetary authority would have to change the quantity of money from time to time to keep pace with the growth of population and capital and to compensate for other factors that might tend to interfere with the circuit flow of money, but its operations should be guided solely by the criterion of price stability or monetary neutrality, under a clear mandate from Congress to that effect. In order to protect it from political influences, its members should be appointed with great care, and they should be paid high salaries with adequate retirement pensions.

Although this proposal constitutes a sharp departure from long established banking customs, it would benefit the banks by protecting them against the disasters to which they are now subject because of the fundamental weaknesses of our banking system. Besides, the logic of events is gradually leading almost inevitably in the direction of the one hundred per cent reserve idea. With the loss of private loan business, a large part of bank deposits is now backed dollar for dollar by government securities.

From this it is but a short step to conversion of these securities into governmentally issued money. Federal Reserve officials and others are conscious of the fact that, in the present circumstances, the old devices of rediscount rates, open market operations, and changing reserve requirements are inadequate to control the volume of credit, and various suggestions which are being offered to deal with this problem have much in common with the one hundred per cent reserve principle. The adoption of this idea, therefore, may not be far off.

The Need for Supplementary Measures.—Although the one hundred per cent reserve plan has great merit, we must not regard it as a cure-all. For one thing, it will not control the velocity of circulation of money, which is sometimes an important factor in monetary disturbances. Especially in times of general economic maladjustment, the price level may be depressed by a reduction in the circuit flow of money induced by lack of prospects for profitable investment. At such times it may be helpful to inaugurate a program of government spending, as suggested by the Keynesians. If so, there should be close cooperation between the monetary authority and the fiscal authorities responsible for formulating and carrying out the spending program.

Likewise, the plan will not remove the basic causes of business depressions. The latter arise partly out of economic maladjustments that cannot be removed or entirely offset by purely monetary measures. Probably they can be prevented only by comprehensive measures of general economic planning, along lines to be presented in Chapter XXX. However, monetary factors are clearly a major aggravating factor in general economic fluctuations and, therefore, such fluctuations can be markedly reduced by the stabilization of prices which the one hundred per cent reserve plan can achieve. The plan should certainly be a part of the broad program by which stabilization of the general economic process is to be sought.

Summary

Stabilization of the price level and of general economic fluctuations requires an adequate program of banking control. Banks perform two main functions—loan, and monetary. These functions are combined simultaneously in the loan operations of commercial banks. The commercial banking school, emphasizing the loan function, believes that bank regulation should be directed toward safety, elasticity, and liquidity. The monetary school, stressing the monetary function, believes that the quantity of bank credit should be controlled so as to promote business stability.

Safety of bank credit is needed to protect holders of bank notes and deposits against loss, and to prevent financial panics. The controls intended to provide safety in our system are (1) provisions for adequate bank capitalization and periodic examinations, (2) the giving of a monopoly of note

issues to the Federal Reserve banks, whose notes are backed by the United States government and by reserves of gold certificates and rediscounted commercial paper or government securities; (3) the requiring of fractional reserves for bank deposits, (4) the power of the Federal Reserve Board to fix margin requirements on loans for stock speculation; and (5) the insurance of small depositors by the Federal Deposit Insurance Corporation. The rediscounting process of the Federal Reserve System was intended to provide automatic elasticity of bank deposits. To prevent elasticity from degenerating into inflation and deflation, the Federal Reserve Board was given power to control the rediscount rate, to engage in open market operations, and to alter the deposit reserve requirements. Liquidity requires that commercial bank assets be confined to short-term loans, but even these may be nonliquid if many banks attempt simultaneously to convert the underlying collateral into cash The Federal Reserve System provides for some liquidity of member bank assets by rediscounting high-grade commercial paper and issuing Federal Reserve notes, and by the separation of commercial from investment banking

In spite of these provisions, our banking system has not provided safety, elasticity, liquidity, or stability A basic reason for this is the confusion of loan and monetary functions This, with the intrusion of government into the field of private lending, has upset the logical division of functions between the state as creator of money and the banks as lenders. Furthermore, the Federal Reserve Board has lost effective control over the credit market because commercial banks can now increase their reserves at will by selling government securities to the Federal Reserve banks The one hundred per cent reserve plan would clear up the confusion by separating banks of deposit from loan banks, requiring the former to maintain one hundred per cent reserves against their deposits The creation of money would then be lodged solely with a federal monetary authority, which would act to stabilize the price level or to preserve monetary neutrality. This would restore the monetary function to the state, leaving to private banks the business of lending. While this would constitute an important part of the machinery for stabilizing the economic process, it would need to be supplemented by an appropriate fiscal policy and by a comprehensive program of general economic planning

REFERENCES AND SUGGESTIONS FOR FURTHER READING

Lucid, concise accounts of the Federal Reserve System are given in the Board of Governors' own pamphlet, entitled *The Federal Reserve System, its Purposes and Functions* (1939), and in Edwin W Kemmerer's *The A, B, C of the Federal Reserve System*, (tenth edition, 1936) A very satisfactory general text, which includes a discussion of most of the matters dealt with in the present chapter, is F. Cyril James' *Economics of Money, Credit and Banking* (third edition, 1940)

Three more recent texts are J. Marvin Peterson *et al.*, *Money and Banking* (1941), which emphasizes the evolution of control, Rollin G. Thomas, *Our Modern Banking and Monetary System* (1942), which attempts to weave together monetary and general economic theory, and Weldon Welfling, *Money and Banking: a First Course* (1947), which deals well with recent issues.

Lauchlin Currie's *The Supply and Control of Money in the United States* (1934) is a scholarly analysis of the nature of bank credit and the problem of controlling it, representing the point of view of the monetary school. Benjamin M. Anderson, representing the commercial banking school, takes sharp issue with Currie in a pamphlet entitled *A Critical Analysis of the Book by Lauchlin Currie, etc.* (1935).

Irving Fisher's *100% Money* (1935) presents a lucid and persuasive account of the one hundred per cent reserve plan. We are indebted to Messrs Paul H. Douglas, Irving Fisher, Frank D. Graham, Earl J. Hamilton, Willford I. King, and Charles R. Whittlesey for their excellently conceived and clearly described *A Program for Monetary Reform* (1939), circulated privately among economists. An article by Charles R. Whittlesey, entitled "Federal Reserve Policy in Transition" in the *Quarterly Journal of Economics* for May, 1946, has also been useful.

PART V

PROMOTING INTERNATIONAL TRADE

C H A P T E R X V I

Barriers to Trade

A. The Protection of Industry Against Foreign Competition

The World Trade Muddle.—Ever since the days of the Greek and Roman empires, when there was trade between the various seaports bordering on the Mediterranean, there has been an active commerce among the different regions of the earth. In the modern world this international trade has become so extensive that it plays a vital role in the industry of almost every country. Each area, developing along the lines to which its natural resources and the aptitudes of its people adapt it, has come to be an exporter of certain products, and an importer of others. In this way the nations have become very dependent upon each other, both for supplies of goods which they have been accustomed to import from abroad and for markets in which to sell the goods which they customarily export. So great is this dependence that the economic prosperity of the world cannot be maintained without the continuance of trade between the nations. When this trade is seriously interrupted, economic life everywhere languishes and sickens.

Prior to the First World War, in spite of certain restrictions, international trade was given sufficient freedom to develop more or less naturally, so that goods moved in enormous quantities across national boundary lines. The interruptions occasioned by the war, and the dislocations left in its wake, cut off many exporting industries from their customary markets. According to League of Nations statistics, the world's foreign trade, measured in gold prices, dropped from an index of 100 in 1929 to only 42 in 1935—a decline of 58 per cent in monetary values. Stated in terms of physical commodities (real income), the index fell from 100 in 1929 to a low of 75 in 1932—a fall of 25 per cent, and then rose to 82 by 1935 [1]

Countries whose industrial systems were geared to a high rate of mass production were especially hard hit by this decline. As a result, they sought in every possible way to expand their foreign markets, while endeavoring at the same time to protect their domestic economies against the disastrous effects of disintegrating world trade Various forms of government intervention in trade spread over the whole world, erecting barriers which only aggravated the trouble. A virtual state of economic warfare developed

[1] Both sets of figures taken from P T Ellsworth, *International Economics* (1938), p 399

After the Second World War, an equally acute situation prevailed. This was a "total" war, which required the conversion of the entire economy of each of the nations involved to the production of military supplies. Industrial dislocations were far greater than in the previous war, necessitating the almost complete domination of trade by governments. At the end of the war, acute scarcities of food, raw materials, and equipment forced many countries to continue these controls. The result is a situation in which trade is likely to be strait-jacketed by nationalistic restrictions that work at cross purposes. If the productive powers of the world are not to be seriously reduced by these impediments, a program of cooperation must be worked out which will permit the resumption of international commerce on a large scale. In this program the United States should take the lead.

Controlled Economies and World Trade.—Any program designed to reduce trade barriers and move towards freer trade must recognize that a new element has entered into the picture with the rise of collective and mixed economies. The most important of the collective economies is that of Russia, not only because of size and power, but also because of the influence it has gained over many neighboring states. The Soviet state owns practically all the productive facilities within its area and operates this vast economic domain on the basis of a detailed central plan. The national export and import requirements are part of that plan, and an agency of the government holds a tight monopoly over foreign trade. Mixed economies, in which state ownership and free enterprise exist side by side, present a very similar problem, for their governments assume primary responsibility for the functioning of the economy as a whole Great Britain and most of the war stricken countries on the continent of Europe now fall into this latter classification.

As all of these countries are confronted with postwar problems, they are not likely to follow a policy of *laissez faire* in trade relations; their governments will demand a firm hold on the flow of exports, imports, and international financial transactions. All programs for future foreign trade relations must fit into this pattern of control.

Some Basic Principles of International Trade.—It will be helpful to review very briefly some basic principles of international trade before attacking the problems of policy which the above considerations pose. We may begin by observing that trade between nations grows out of geographic, or regional, division of labor. Each nation is a little different in climate, natural resources, quality of the people, and the technical state of the arts. Barring interference, these are the chief influences that determine the course and nature of international trade. A nation tends to specialize in the production and exportation of those commodities which it can produce most effectively, importing in exchange those commodities which it can produce least effectively To put it differently, a nation tends to import those goods which other countries

can produce more cheaply than it, and to export those goods which it can produce more cheaply than they. This is the familiar law of comparative costs. It pays a nation more to specialize in those industries which its available natural resources, technical equipment, and population make most advantageous, and to rely on international trade to supply the commodities that it can produce only at heavy costs at home.

The items of trade between nations are of three sorts—commodities, services, and credit transactions. Commodity exports and imports, such as manufactured goods, raw materials, gold, and silver, are known as the visible items of trade. Services rendered, such as shipping, banking, and insurance, taken together with the credit transactions—loans, interest payments, and the like—constitute what are called the invisible items of trade. International trade must be viewed as an exchange of commodities and services for other commodities and services. It follows that the total visible and invisible exports must balance the total visible and invisible imports. The commodities and services we obtain from other countries must be paid for; we are in their debt to that extent. On the other hand, the commodities and services we deliver to other countries, they must pay for; we have credit abroad to the extent of these exports. If these debits and credits do not balance, the difference must be paid in specie or temporarily charged up as a loan.

The various kinds of international trade dealings necessitate payments between individuals in different countries. Since each country has its own monetary system, the manner of making payment is much more intricate in foreign trade than it is in domestic trade. Payment is accomplished by the use of credit instruments called bills of exchange. A bill of exchange is a draft drawn by a creditor against a debtor, ordering him to pay a specified sum of money to a certain party, at a certain time and place. An American exporter of wheat to England has money due him from that country; an Englishman owes him the purchase price of the wheat. The American can draw a bill against the English importer, ordering him to pay the amount of the purchase in English pounds at a certain time and place in England. There will be at the same time other Americans who have imported goods from England—English cutlery, for example. Such Americans will wish to make payment to English manufacturers for their purchases. Our wheat exporter can sell his bill to a cutlery importer, and thereby secure the money due him. The cutlery importer can then send the bill to the English manufacturer in payment of his debt. The English manufacturer can present the bill for payment to the English wheat importer, against whom it was drawn. Thus, the two transactions can be settled without the actual movements of money across the water. Through the medium of a bill of exchange, English cutlery pays for American wheat.

The price at which bills of exchange are sold is called the rate of exchange. Under gold standard conditions (which prevailed in the leading commercial

nations before the First World War) this rate is at par when bills sell for their equivalent in gold. The prevailing rate will be above or below the gold par, depending upon variations in the supply of and demand for bills. The upper and lower limits of this fluctuation in rates are set by the costs of shipping gold. Gold movements tend to correct discrepancies between the supply and demand of bills. If the supply of bills of exchange in the United States exceeds the demand for them (which means that total exports have exceeded total imports) gold will tend to be imported to restore the balance. Where nations have abandoned the gold standard, the stabilizing influence of gold movements is lost and the rate of exchange depends upon the purchasing power of the paper currency, and on various speculative factors, such as the possibility that gold payments will be restored. Bills of exchange are rarely sold directly to an importer by an exporter. A middleman, such as a dealer in exchange or a banking house, handles such transactions. Usually exporters with bills for sale will sell them to a dealer or bank, and importers wishing to purchase a bill will go to a dealer or bank to obtain one.

A Nation Cannot Sell If It Will Not Buy.—The basic principle that underlies all this machinery of payments is that goods pay for goods. The use of bills of exchange makes this possible. It follows that a country pays for the goods it buys by means of the goods it sells, and it collects payment for the goods it sells by means of the goods it buys. There is a corollary principle that is essential to an understanding of the issues involved in trade policy. It is that *a nation cannot sell if it will not buy.* If we try to sell goods to foreigners without buying an equivalent amount from them in return, they have no means of paying us. If they tried to pay us in their own money, we would have no use for it, because we could not spend it in this country. If the gold standard prevailed, they could pay us in gold for a time; but that would soon inflate our currency to the point where prices here would be so high that foreigners would find this a dear country to buy goods in. Our products would be too expensive for them and our exports would decline. Only by taking foreign goods in exchange can we maintain the volume of our own exports. We will see, as we proceed, how this principle renders fallacious many of the arguments that have commonly been advanced in favor of trade restrictions.

The Case for Free Trade.—Any person who reads an exposition of the principles of international trade with a reasoning and open mind must be impressed with the strength of the case for free (i.e., unrestricted) trade. The simple principle that a country gains most by concentrating on the production of goods and services to which it is best suited does not require a profound knowledge of economics to be understood. Common sense is sufficient to grasp the idea that the greatest economy and efficiency in the use of the world's natural resources, technical equipment, and labor supply, would be

achieved if the channels of trade were free and unobstructed. Each country would gradually find its place in the world's markets, concentrating on the things for which it was best suited and depending on other nations for the things that it could produce only at a comparative disadvantage. Almost every act that restricts the freedom of trade tends to reduce proportionately the gains of specialization and, consequently, to reduce the real income available for the world's consumption. This is because the restriction of trade diverts productive activity away from industries in which the advantage is great towards industries of less advantage.

The United States illustrates the operation of free trade. Within our boundaries each of the individual states specializes in forms of productive activity to which it is well adapted. Thus, New England states specialize largely in manufactures, the southern states in cotton, the middle western states in wheat and corn. California and Florida are famous as producers of citrus fruits. Now suppose that the United States were divided into three independent countries, the first including the region from Canada to the Mason-Dixon line and from the Mississippi to the Atlantic, the second including all land south of the Mason-Dixon line and west as far as the Mississippi, the third including all territory west of the Mississippi. The protective propagandists would now probably become active in these three countries. Each country would seek to build up its own industries and shut out the products of the other countries. The advantages of climate, resources, and large-scale production would be lost, and each area would be taking on productive activities at a disadvantage. Some individual producers within the countries might gain, but the country as a whole would obviously suffer a loss. Pushed to a point of absurdity, New England might place a tariff high enough to prevent the importation of citrus fruits, in order that it might build up a citrus fruit industry of its own Hot-houses would be constructed, laborers employed, equipment purchased, and business organization developed! According to the doctrines of protectionists, the prosperity of New England would be much enhanced! It is quite obvious, however, that the opposite would be true; she would find her prosperity reduced. By concentrating on manufacturing (to which she is well adapted) and exchanging the product for citrus fruits, she can secure a larger quantity of the latter, per unit of productive effort expended, than she could by producing them herself. This illustration may seem absurd, but the principle involved is exactly the same when the degree of disadvantage, being less, is not quite so obvious. The division of our country into three independent nations, each with a protective tariff system, would have a disastrous effect on the development of future prosperity. It would cripple tragically the efficient, specialized, economic organization that has evolved within our boundaries The case for free trade rests on the advantages of specialization. The inefficiency of forcing on a nation the production of goods under conditions of disadvantage

should be obvious to all. Protection of industry in some cases may be worth what it costs, but any argument in its favor that fails to recognize that cost is apt to be fallacious.

The Protective Tariff.—There is no phase of economics where greater divergence exists between the teachings of economists and actual practice than in the matter of the protection of industry. The conclusions of most of the world's greatest economists, ever since Adam Smith published his *Wealth of Nations* in 1776, have been overwhelmingly in favor of free trade. But, with the outstanding exceptions of Great Britain and Holland, nations have generally followed vigorously the policy of erecting tariff walls to restrict the importation of commodities, and even Great Britain has been moving toward a protective policy in recent years.

A protective tariff is a duty, or tax, placed on specified imports into a nation, levied for the purpose of enabling the home producers to raise the price of their commodities to a point high enough for them to sell their product at a profit in spite of the competition of producers operating under lower production costs abroad. The home consumer is asked to pay a higher price for the goods he buys in order to keep the home industry in existence. Home industries which operate at a disadvantage are thus enabled to run at a profit. In so far as a protective tariff really protects (that is, keeps out the more cheaply made foreign product) the advantages of geographic specialization are lost. Such a policy always means a cost to the nation, for under it the output of industry must be of less value than would be obtainable if it concentrated on what it could do best and purchased other products from abroad. The arguments used to support our protective tariff system are lamentably weak, but their wide popularity makes it necessary for us to examine carefully the reasoning on which they are based. We shall find some justification for protection of a modified sort. The evidence is not *all* on one side of the question, but the usual defences of protection are full of errors.

The Balance of Trade Argument.—Much of the support given the policy of protection is based upon a widespread belief in the desirability of a "favorable" balance of trade. A "favorable" balance, as the term is popularly used, means that commodity exports exceed commodity imports. This situation is called "favorable" on the assumption that the balance will be paid in some form of money; in popular language, "It brings money into the country." An "unfavorable" balance of trade means that commodity imports exceed commodity exports. It is considered "unfavorable" because it is supposed that money must flow out of the country to restore the balance. To bring money into a country is thought to make it wealthy, while to reduce the stock of money is believed to make it poor. Exports, consequently, are to be stimulated by every possible means and, conversely, imports are to be discouraged. This was the actual policy followed by our government for

decades. The Departments of Commerce and of State devoted considerable energy to the building up of export business, while by high tariff barriers we obstructed imports. Not until the adoption of the reciprocal trade agreements program of the late nineteen thirties (which will be described in a later paragraph) did we begin to make any concession to the idea that trade must be in both directions.

This naïve belief in the policy of developing a "favorable" balance shows ignorance of the fundamental principles of both trade and money. It runs directly counter to the basic proposition, developed above, that a nation cannot sell if it will not buy. Imports are paid for, not by the sending out of money, but by exports; hence the curtailment of imports tends eventually to reduce exports. When an American exporter seeks payment for his goods, he draws a bill of exchange against his foreign customers. This bill he hopes to sell to an importer, making payment for goods or services purchased abroad. If, however, importations have been materially reduced, our exporter may be unable to sell his bill, except at a loss. Under a gold standard he would have the option of using his bill to obtain gold abroad, but this would only raise prices in the United States and lower them abroad, discouraging American sales to foreign purchasers and encouraging American purchases abroad. Under a paper standard he would not have that option and would have to take a much lower price for his draft. This drop in the exchange rate would also make foreign sales unprofitable. Thus in either case the ultimate effect of the restriction of imports would be to discourage exports and to encourage imports until trade reached a balance, but it would be a balance in which the volume of goods exchanged in both directions would be less than it would be if the restrictive policy did not prevail. Therefore we must conclude that the effect of restricting imports is to reduce the amount of trade. This means that high tariffs injure those of our industries that produce for the export market.

The Infant Industry Argument.—One of the earliest arguments in defense of tariff duties was that they are needed to protect infant industries. A tariff can be used to protect new industries from foreign competition until they are able to stand on their own feet. This argument has taken both a general and a specific form. The general form was made famous by the German economist Friedrich List, writing in 1841. He observed that a country in the agricultural stage of development, about to advance into the manufacturing stage, will meet difficulties during the transition period in competing with industrialized nations already established. He had in mind the new industries developing in the United States and Germany at the time of his writing, which industries faced competition from the firmly established industries of Great Britain. He advocated the use of protective duties to reduce the difficulties of the transition period. The specific form of the infant industry argument is the application of the principle to a single industry even

after the industrial stage is well under way. During the Second World War a number of new industries were established in this country. The synthetic rubber industry is an example. These industries faced serious competition with the return of normal trade relations. It is to be expected, therefore, that protection will be demanded for them, with the promise that eventually they will be able to meet foreign competition without government aid.

Economists generally admit that there is some merit in the infant industry argument, but it can be held to justify protection only in the case of industries in which the protecting country may be expected eventually to have a comparative advantage. There is nothing to be gained by protecting "infants" which will remain permanently at a disadvantage. In practice this distinction has proved difficult to apply. How can one tell in advance which industries will in the long run be able to stand on their own feet and which will not? Selection of industries to be protected degenerates into political bickering. At best this argument justifies protection only for a short, temporary period. List limited the period of protection to twenty-five years. However, once protection has been granted it is hard to secure the removal of the duties. Vested interests become firmly intrenched, and new arguments are used to justify continued protection.

The Home-Market Argument.—Under the leadership of Alexander Hamilton, the protective tariff policy was inaugurated in the United States on the basis of the infant industry argument. With the passing of a quarter of a century this argument was no longer applicable, so a new defense of protective duties was brought forth, known as the home-market argument. It was popularized largely under the leadership of Henry Clay. The protection of manufactured goods, it was claimed, by keeping out foreign competitors, builds up a new industry at home that would not otherwise exist. The new industrial community which develops in the center where this industry is established constitutes a new and additional market for the sale of domestically produced goods, especially farm products. The argument was used to win over the agricultural sections of the country to the support of tariff duties.

The fallacy inherent in this reasoning is that an additional market is not created by protection, but a domestic market is substituted for a foreign market. The cutting off of imports would have the effect of reducing exports. Therefore, in building up new industries, protection does not create an additional industry; it merely diverts labor and capital from industries which would otherwise be exporting goods, to industries producing goods which would otherwise be imported. A national loss results because an industry in which we are at a disadvantage is substituted for one in which we can produce at an advantage.

Some proponents of the home-market argument admit that there is a slight loss in this respect, but they hold that there is an offsetting gain due to the fact that the urban industry created by the tariff, being nearer to the

farmers, offers the latter a market that is less likely to be interrupted by international disturbances, and the market is therefore more stable. They also hold that the nearby market requires less transportation costs. There is some validity to the first part of this reasoning, but not to the second. Distance from markets cannot be considered economically a disadvantage, if the loss in transportation costs is more than offset by the gain in specialization. Goods are purchased from abroad because they can be obtained cheaper than at home, even after paying all transportation costs.

Of late, the home-market argument has been put in a slightly different form. Large-scale industries with heavy capital investment require stability of output, it is said, for a slight drop in sales may force the industry into bankruptcy because of the continuation of the overhead expense. It is argued that protection should be granted such industries in order to guarantee them at least the domestic market, and to that extent stabilize these industries. The plausibility of this reasoning has given some support to those who favor the unfortunate current trend toward nationalism.

The High-Wages Argument.—To gain the support of labor, protectionists have always claimed that the high American wage level is the direct result of our protective tariff policy, and that the continuation of this high level is dependent upon the continuation of that policy. It is claimed that competition with the pauper labor of foreign nations would lower American wages and reduce, consequently, the American standard of living. The truth of this contention is said to be demonstrated by a comparison of American wages with those prevailing abroad.

This reasoning errs in confusing high wages with high labor cost. There is no necessary relation between these two factors. Labor costs should be measured in terms of cost per unit of production rather than in wages per man. Labor costs in the former sense are low in the United States. This contention is substantiated by the large volume of our export business. Many American producers are evidently able to pay high wages plus transportation costs across the ocean, and yet undersell the foreign producer in his own market. If labor costs were so much higher in the United States than abroad, how would it be possible to export any merchandise at all? Surely this argument proves entirely too much!

There is another fallacy in the high-wages argument for protection. It assumes that the tariff increases the demand for labor by building up industries that would not otherwise exist here. This is implicit in the argument, for unless it raises the demand, how could it cause high wages, or prevent low ones? But we know, from our reasoning in connection with the home-market argument, that the tariff does not add to the total volume of industry; it merely changes its direction, diverting it from products in which we have an advantage, and which we would normally be exporting,

to products in which we are at a disadvantage. Therefore, it does not increase the total demand for labor and cannot contribute to high wages.

The explanation of the high wage level in the United States is found in our marvelous natural resources, the technical development of our industries, and the enterprise and efficiency of our people. Wages would probably be high in the United States under any system They are just as high in non-protected industries as in protected industries. In truth, it is because wages *are* high in certain industries that other industries, to which we are not so well adapted, find they must be given financial aid in order to secure labor and yet meet foreign competition. The principle of opportunity costs is here at work. We must conclude that protective tariffs do not maintain high wages. On the contrary, protection must lower real wages, by increasing the prices of the commodities that workers buy

The Employment Argument.—Closely allied to the high wages argument is the claim that low tariffs cause unemployment and that high tariffs establish new industries and increase employment. Economists have pointed out with wearisome repetition that unemployment has not been more general, on the average, during periods of low tariff duties than during periods of high tariff duties in the United States. The obvious fact, that the removal of a tariff duty does frequently cause workmen employed at the time in that industry to lose their jobs, closes the eyes of the average person to the broad question of social advantage. Such unemployment is not permanent This is only an argument against a sudden and complete abandonment of tariff duties. We may repeat once more what has already been emphasized, that an additional industry is not created by a protective tariff, but one industry is merely substituted for another. The real causes of unemployment, together with appropriate remedies, we have already analyzed in Chapter X

The Diversity of Industry Argument.—In some countries, trade may result in the narrowing of productive activity to a relatively small number of specialties. Protective duties reduce this specialization and tend to diversify industry. Many persons believe that the advantages of diversification so obtained compensate in the long run for the loss resulting from the reduction of specialization. Economically, the gain is in the greater stability that is given to the economic organization. The experience of our southern states in specializing almost completely in the production of cotton indicates the danger to be guarded against When cotton prices are high the South is prosperous, but when cotton prices are low it is in depression. Everything depends on the price of this one commodity The high degree of industrial specialization that prevails in England has had similar consequences during the war and postwar periods. Free traders can reply that diversity of industry is purchased at the cost of a reduction in real national income, but it must be admitted that in a world of political and economic instability there is something to be said for this argument for protection. However, would

it not be better to work for a world of peace and free trade, so that all may enjoy the benefits of geographical specialization?

Economic Self-Sufficiency and Political Unity.—German protectionists have made much of the claim that a nation should be economically self-sufficient, so that in time of war it would not be dependent on other nations for the commodities it requires. Since Germany long ago developed a highly industrialized economy, the argument has been that agriculture, rather than manufactures, should be protected, in order to round out a balanced and independent economic organization. Even in peacetime some merit is claimed for economic self-sufficiency because changes in the course of international trade will, under such conditions, affect a nation less seriously. England, for example, is finding that the nations with whom she previously traded her manufactured products for foodstuffs and raw materials are now developing industrial organizations of their own. The result is a drop in her foreign trade. A heavy strain has been placed on English industries; it has become increasingly difficult to obtain raw materials and foodstuffs and to find markets for finished manufactured products. The solution of this problem is one of the many serious questions facing the English people today. Some writers have gone so far as to predict that a complete reorganization of the economic life of that nation will have to be effected.

Perhaps the economist is to be censured for viewing the world from an international, free trade point of view. The world today is so divided into nationalistic units that until much progress is made towards international peace the economist will do well to fit his theories to existing conditions. There is little doubt that the future economic development of the world must eventually alter our present conception of foreign trade. It is conceivable that, after the temperate zone is completely industrialized, we may be forced to a form of regional international planning, with foreign trade restricted to interregional trade in products peculiar to a given area, and trade between the temperate zones and the tropics. But in the opinion of the present authors, even if this situation were to eventuate, it should result from a process of evolution, not from artificial restrictions. Trade barriers of the absurd type so prevalent today can only make more difficult the attainment of the ultimate goal.

Protection Against Dumping.—The practice of selling goods in a foreign market at a price lower that the total cost of production is known as *dumping*. The reason for this practice is the desire of producers to market surplus goods without "breaking" the domestic price. Dumping may be of two different sorts—irregular (or temporary) and regular (or continuous). Many industrial enterprises find on their hands at irregular intervals a surplus stock of finished products. If this stock is placed on the domestic market, the price must be lowered in order to find purchasers, in accordance with the economic law of demand. But if this were done, it might be difficult

in the future to restore the domestic price to the original point. Therefore the producer seeks to place his surplus products on a foreign market, selling them at whatever price they will bring, so long as operating (or variable) costs are covered. Permanent or continuous dumping is profitable only under monopolistic conditions. If an industry has a monopoly of the domestic market, it may fix the domestic price of its product at the point of greatest net return, and use its surplus plant capacity to produce goods for a foreign market, selling there, as in the previous case, for whatever price can be obtained, as long as operating costs are covered. Dumping may then last for long periods of time. Under competitive conditions it is clear that this practice would be impossible, since domestic prices would be forced down under active domestic competition.

The economic effects of dumping should be viewed from the angle of both the domestic consumer and the foreign consumer. The foreign consumer obtains the dumped commodities at very low prices—less than the total cost of producing them. If the dumping policy is permanent, the industry of the importing country can adjust itself to such importations, and the country as a whole stands to gain. If, however, the dumping is irregular, the effect is to dislocate the industry temporarily, for while the dumped products are being imported, the local industries face heavy losses and may be driven out of business. Later, the failure to continue importation will cause a shortage to develop, and local prices will soar. Conditions would be very unstable in the foreign market. As to the country from which the goods are dumped, consumers there will gain by the practice of dumping if the goods are produced under competitive conditions. This is because the sale of surplus products abroad will reduce the share of fixed charges which the domestic buyers must pay. This result does not follow in case of monopoly conditions, for the gain would then go principally into increased monopoly profits.

Tariff duties specifically directed against dumping are quite common. Many free traders modify their views to the extent of advocating tariffs of this kind. If the importing country levies a tariff duty just high enough to equalize the price of the dumped product with the price charged in the producing or exporting country, then the home industry is not unduly protected. If the foreign producer can undersell the domestic producer under such conditions, it must be because his total cost of production is lower, and the principle of free trade is in operation. The difficulties with duties designed to protect a country against dumping grow out of the practical application of the principle. It is very hard to discover just when dumping is taking place and to what extent a low price is the result of this practice. And, assuming that these facts are accurately ascertained, the duty must be imposed on the dumped goods *after the act has occurred*; it is therefore likely to be ineffective against the most common form of dumping—the

irregular, sporadic type. The first difficulty can be reduced by placing the power of altering duties in the hands of an administrative officer, but even then the practical result in many cases will be to establish just one more opportunity for the raising of miscellaneous protective duties.

Protection by Bounties (Subsidies).—While the protection of industry is usually secured by the levying of duties on imports, the same end can be accomplished by the granting of bounties, or subsidies, as they are often called. A bounty is a direct payment by a government to an industry for the purpose of stimulating its growth, in contrast with the indirect financial support given an industry by tariff duties, which work by raising prices. The bounty brings out into the open the true nature of protection—the extending of financial assistance to a particular industry For that very reason, bounties are often favored by free traders as a substitute for protection, since then even an uninformed citizen voter can see that protection of industry *costs him something*, and many of the arguments commonly used for protection in political campaigns then lose much of their plausibility. Another advantage of the bounty is that the burden of a protective policy can be placed on those best able to bear it by a carefully devised tax law, instead of forcing the consuming public to bear the major portion of the burden in the form of higher prices If we must have protection, the bounty is probably preferable to tariff duties.

B Other Trade Barriers

The Growth of Trade Barriers Since 1929.—The pressure for increasing state control over foreign trade has been especially strong since 1929 Even England, the traditional stronghold of free trade, adopted a general tariff in this period. In 1932 an Imperial Economic Conference at Ottawa, Canada, resulted in considerable extension of the tariff system and at the same time granted preferential advantages within the British Empire. In the United States, the Smoot-Hawley Tariff of 1930 raised rates to very high levels. This action induced direct retaliation from abroad Old techniques were used with renewed vigor and new techniques were introduced It is difficult to appraise the effectiveness of indirect restrictions, such as voluntary boycotts against foreign products, clauses inserted in loan contracts requiring the expenditure of borrowed funds within the lending country, onerous inspection regulations at ports of entry, and freight rate discriminations. But several direct controls have been very effective, namely the quota system, currency depreciation, foreign exchange control, raw material exports control, and international cartel agreements.

The Quota System.—Tariff protection excludes foreign goods only to the extent that the higher prices of such goods resulting from it deter buyers from purchasing them Imports, however, can be restricted directly and

positively by means of import quotas. Quota systems vary widely, ranging from simple governmental decrees which fix the amount of a specified commodity that can be imported in a given period (often set at three months), to elaborate systems in which importers are licensed, and to the development of agreements between foreign and domestic competitors as to how the domestic market shall be divided between them. Usually the volume of imports is limited to a stated percentage of imports in certain specified earlier years (before quotas were established), either for imports of certain goods as a whole, or individually, by countries. For instance, the United States, under a quota system, might decree that for the next five years the amount of hardware imported into this country must not exceed fifty per cent of the average amount of such goods that were imported during the five-year period from 1925 to 1930; or, that the amount of hardware admitted from each foreign country must not exceed fifty per cent of its average share of hardware imports during the stated base period. In the period between the two world wars this was a favorite form of trade restriction because by this means the desired result could be attained very accurately.

The arguments for and against tariffs apply equally well to the quota system Such drastic restrictions can be justified only to meet urgent internal problems.

In passing, we should note that import quotas are not as beneficial to a government treasury as are tariff duties If imports are restricted by quotas, the same tariff rates apply as before the quotas took effect, but they apply to a smaller volume of goods, so that revenues are decreased; but if the same reduction in imports is accomplished by raising tariff rates, the duties collected will increase. State revenues are therefore greater under the tariff method of restriction. Both systems tend to raise domestic prices because they reduce the supply of commodities

Export Stimulation by Currency Depreciation.—A rapidly depreciating currency gives a temporary export advantage to a country, because foreign exchange rates respond very promptly to currency depreciation, while the price level reacts more gradually, spreading slowly from one group of commodities to another. So, when a country's currency is depreciated (e.g. by fiat money inflation) its exchange rate falls rapidly in terms of foreign currencies, but its price level does not immediately rise to the same degree. This makes it possible for foreigners to buy its goods more cheaply, so that its exports increase For instance, after the First World War there was a drastic inflation in Germany. Americans then found that, as the value of the mark fell, the number of marks that could be obtained for a dollar increased faster than prices in Germany were rising, making it very profitable to buy German goods.

Countries with controlled national economies, when in urgent need of industrial materials, find the temptation to depreciate their currencies very

strong. Such action, by increasing their exports temporarily, gives them a supply of foreign exchange with which to purchase needed foreign goods. This can easily lead to a series of competitive currency depreciations on the part of several trading nations when they are suffering from the dislocations and distress of war. Each country tries to outmaneuver the others in a struggle to establish export balances. The consequences can be disastrous for all concerned, for each new act of depreciation brings retaliation and generates a new pressure for stronger governmental control. Exactly such a situation developed between the two world wars, and it contributed greatly to the economic difficulties of that period.

Foreign Exchange Control.—Currency depreciation can have only temporary advantages, but continuous control can be accomplished by restrictions upon the private sale and purchase of foreign bills. Consider once more the situation of many European governments after the First World War. The victors were heavily indebted to the United States for war loans (on which interest was due) and the vanquished were under obligations to make huge reparations payments. In addition, most of these countries needed to buy abroad foodstuffs for their peoples, and raw materials and equipment with which to reconstruct their industries. Their monetary gold stocks, already considerably reduced by payments made during the war to buy foreign goods, were threatened now with total depletion if gold had to be used for these postwar payments—and anyway there was not enough of it to pay the sums required. The only way out of the situation was to obtain sufficient credits abroad so that the payments could be made in bills of exchange. This made it necessary to encourage exports in every possible way, and to restrict imports to those goods which were absolutely indispensable. A simple and positive means of restricting the imports was to control the sale of foreign bills so that they could be used only for those purposes that were deemed most important. These considerations were reinforced by the desire, in controlled nationalistic economies, to protect the internal plans of the governments against external disturbances transmitted through trade channels. This last is a factor of increasing importance since the Second World War.

The methods by which exchange control has been accomplished are numerous and diverse. The more direct forms range from mere appeals to the public up to complete elimination of private dealing in foreign exchange. Moral suasion generally proves ineffective unless a wave of national patriotism happens to coincide with its use, therefore more effective legal means must usually be adopted. In some cases the exportation of "capital" is prohibited; an embargo is placed on shipping securities, or on moving liquid bank balances. In other cases the control reaches beyond capital transfers and seeks to limit commodity exports. Businessmen are compelled to secure permits before they can purchase foreign drafts, and the government is

thereby enabled to allocate the available foreign exchange as it sees fit. In the most extreme form of interference, the government abolishes the free market and sets up a state monopoly of foreign exchange dealings. Exporters must then sell, and importers must buy, their foreign bills from the authorized governmental agency.

An interesting innovation, known as the *blocked account* system, entered the international scene after 1931. Briefly stated, its purpose was to enable solvent domestic debtors to satisfy their foreign obligations in domestic currency and thereby relieve themselves of the necessity of purchasing foreign exchange. Germany was one of the most ardent champions of this plan. Suppose that a German firm owed ten thousand dollars to an American manufacturer from whom goods had been purchased. Under the blocked account plan, the German government authorized the debtor firm to pay the amount of its obligations into a bank account in marks. This account was then placed to the credit of the American firm, and the German government, through its central bank, determined the conditions under which these credits could be transferred to the United States. The regulations controlling such transfers were extremely complex, varying according to the category under which the source of the blocked account fell. The difficulties were such that the American firm would be quite willing to sell its credits in the account at a loss in order to reclaim at least part of the funds due. Titles to blocked accounts are frequently bought and sold both openly and surreptitiously, often at a large discount. The use of the blocked account has spread over most of Europe and many Latin American countries.

The practice of exchange control has led logically to international agreements known as the *exchange clearing system*. This plan seeks to restore trade between two countries by an agreement that is not far removed from the direct bartering of goods and services. The bilateral agreement of Switzerland and Hungary in 1931 was one of the earliest of these agreements. Under this agreement, a Swiss importer of Hungarian goods was required to make payment in Swiss francs into a special account within Switzerland. Likewise a Hungarian importer of Swiss goods made payment into a special account within Hungary in Hungarian pengoes. A Swiss exporter to Hungary could then receive his money in Swiss francs by payment from the Swiss special account, and a Hungarian exporter could receive his money from the Hungarian special account. Periodically the two central banks cleared their special accounts, and if they proved to be unequal, made agreements to take care of the difference by loans, by stimulation of exports, or by limiting imports. The purchase and sale of foreign exchange by individual importers or exporters was completely eliminated. Exchange clearing is at best a stopgap program. Where trade relations suffer complete breakdown, emergency methods may be essential to get goods moving again, but the

fundamental causes of the breakdown, internal and external, remain untouched In the long run, it is these that must be dealt with.

The Control of Raw Materials.—The dependency of certain industrialized nations (such as Great Britain and prewar Germany) upon foreign sources of supply for raw matrials has led producing countries, seeking to profit by this dependency, to establish various schemes for controlling exports of raw materials. The list of materials under control, now or in the past, is quite long, and includes coffee, mercury, nitrates, potash, rubber, oil, silk, sugar, sulphur, tin, and other important basic commodities. The reasons for controlling their exportation are to obtain public revenue, to increase the profits of producers, and to stimulate processing industries within the countries concerned

The United States is the largest consumer of the controlled products, but we have given scant attention to the problem We have been more interested in tariff protection against imports, and in securing new foreign markets for our own goods. However, legal action has been taken against the American representatives of foreign cartels, under our antitrust laws, as in the cases of the Dutch quinine monopoly and the Franco-German potash monopoly. The making of loans to countries that restrict raw materials has also been discouraged in a few cases, including coffee, potash, and rubber. Some attempts have been made to encourage domestic production, the development of substitutes, and the reclaiming of used materials; rubber and nitrates are here the best examples. However, little has been accomplished, except in the case of synthetic rubber, which developed into an important industry here during the Second World War. A nationalistic approach cannot be effective, even if it includes forms of retaliation. International action is necessary if a solution to the problem is to be found. The League of Nations studied the problem, and repeated discussion has taken place at international economic conferences It is to be hoped that this movement will continue, for there are many raw materials that can be added to the present list, and many possibilities for creating new sources of international friction lie dormant in the present situation.

Cartels as Barriers to Trade.—In Chapter III we had occasion to point out that the growth of monopolistic combinations does not always stop at national boundary lines, international combinations, or cartels, dominate large portions of the world markets One authority states that a tentative list of 179 such agreements, of which 109 included American enterprises, was compiled by our State Department for the year 1939.[2] These international cartels are often supported by governments in controlled nationalistic economies. They can accomplish by simple agreement most of the objectives of other

[2] Corwin D Edwards, cited by Calvin B Hoover in *International Trade and Domestic Employment* (1945), p 77

trade barriers, such as quota systems and tariffs. Markets can be divided, prices and output can be controlled, and new competition can be destroyed by price cutting in areas where new producers appear. Where overcapacity and underemployment face a nation, the cartel can either aid or block programs for full employment by means of its control over foreign trade. Unless vigorous action, by international agreement, is taken against the international cartels, all other attempts to open trade channels may be completely negated This form of trade barrier must be given greater public attention, for it may soon outstrip the sum of all other varieties of trade impediments put together.

C. Towards Freer Trade Policies

The Making of a Tariff.—Although realists may be justifiably skeptical of the possibility of attaining complete freedom of trade in our time, there is much to be gained by moving gradually in that direction Tariffs can be lowered and other barriers reduced or restrained by a policy of international cooperation. As a first step, we must reform our own tariff-making techniques and policies at home.

An American tariff bill is not the result of a careful weighing of the national interest; it is a heterogeneous set of regulations arrived at by a multitude of compromises among representatives of pressure groups and geographic areas. Under the federal constitution, tariff bills must originate in the House of Representatives. The House of Representatives delegates the duty of framing the legislation to the Committee on Ways and Means This committee holds public hearings at which the supporters of both sides of every proposed duty may express their opinions and defend their own positions. The views expressed are colored by the prejudices and interests of the individual represented. After the bill has been written, it is submitted to the House of Representatives, and many amendments are made on the floor. This process of amending is a vicious one, for it frequently degenerates into a "give and take" arrangement, each representative agreeing to vote for duties desired by other representatives, in consideration for their voting for his own suggestions. The result is that each is likely to obtain a protective tariff on the products that are produced in his home area. After passage, the bill is submitted to the Senate, where it is again modified. A joint conference between the two houses whips the final act into shape, and after passage by both houses it goes to the President for his signature.

This procedure is wide open to pressures exerted by special interests through powerful lobbies. The outcome is a complex tariff law, levying an unreasonable number of import duties, many on commodities of little or no social significance. The late Professor Taussig, in discussing this question, cited two very interesting and typical cases A duty on cheap cotton gloves was inserted in the Dingley Act of 1897 while the measure was under debate

in the Senate. This provision had the effect of giving a certain corporation a monopoly of the sale of this form of glove, used primarily by policemen, United States Marines, and state militia, for dress occasions The glove previously was imported from Germany. A second illustration is that of a duty on nippers and pliers, also introduced by the Senate in the same bill. This amendment was inserted at the request of a Utica manufacturing concern and was adopted for the special benefit of that specific corporation.

The Independent Tariff Commission.—One method of reducing the evils of special privilege would be to establish a strong, independent tariff commission. Unfortunately, American experimentation in this direction does not give ground for much optimism. Dissatisfaction with the conditions under which previous tariff laws had been formulated led in 1909 to a provision giving the President power to employ expert assistance for purposes of obtaining information useful in administering the tariff laws. On this authority, President Taft appointed a Tariff Advisory Board. This was succeeded in 1916 by the United States Tariff Commission, which has continued to function up to the present time. The commission does not have the power to fix rates, (as, for example, the Interstate Commerce Commission does for railroads) because that power, in so far as customs duties are concerned, is given only to Congress by the Constitution. To give such power to a commission would probably require a constitutional amendment. The commission exists primarily for the purpose of investigating the operation and effects of customs duties. It makes reports of its findings and advises Congress and the President on the rates that should be adopted and the form the tariff law should take. The findings of the commission have thus far had but little influence on legislation. If the United States is to arrive at a scientifically constructed law and a uniform and stable tariff policy, the Tariff Commission, or some similar independent body, must be given a stronger hand. This will be indispensable in leading us out of the morass of special privilege and petty politics in which the whole American tariff controversy is now engulfed.

Reciprocity and "Most-Favored-Nation" Treaties.—The principle of reciprocity is a useful means by which international cooperation toward freer trade can be assisted In protecting their own home industries, nations have found that they have brought on themselves retaliation in the form of protective duties in other countries to which their goods were exported. Desire to overthrow these restrictions has led many countries to negotiate treaties with the countries to whom their exports flow. This has given rise to reciprocity, in which a country reduces its duties on the products of certain other countries in return for similar favors from them. The benefits of these reductions are automatically extended to many other countries because of the existence of "most-favored-nation" clauses in commercial treaties. This clause is interpreted to mean that any favor granted by one country to another is

simultaneously extended to all other countries that have "most favored nation" agreements with it. Today a network of commercial treaties involving reciprocity and "most-favored-nation" clauses has been established. A more direct attack upon trade barriers would be desirable, but these treaties have the merit of permitting a controlled, gradual transition towards the goal of less restricted trade relations.

Reciprocal Trade Agreements.—A hopeful move toward liberalizing the American trade policy was made by the passage of the Reciprocal Trade Agreements Act of 1934. This law authorized the President to negotiate reciprocal trade agreements with foreign countries, and to put the same into effect, without the necessity of obtaining approval by the Senate (which ordinarily must concur in the making of treaties). Power was given to raise or lower tariff rates in these agreements by not more than fifty per cent. As a result of most-favored-nation treatment, any specific reductions are extended to other countries which do not discriminate against the United States. Through this unusual grant of power, twenty reciprocal trade agreements had been successfully negotiated by 1939.

While the purpose of the law was to revive foreign trade, the Federal Trade Agreements Committee, which was charged with the task of formulating the agreements, sought to prevent any drastic weakening of the American protective tariff system. This intent was carried out by basing the program on two broad principles. In the first place, tariff reductions were confined to import commodities which came mostly from the particular nation with which the agreement was being made. The bulk of each of our imports (averaging 71 per cent in 1931)[3] comes from some one foreign country, only a relatively minor proportion being derived from other, scattered sources. Thus it is possible to avoid giving broad concessions to countries that are not parties to reciprocal trade agreements by reducing rates in a given case only on the goods in which the particular nation concerned is our main source of supply. Secondly, the committee has sought to avoid reducing rates on commodities that are "directly in competition" with American industry.

Prior to the drastic interruptions to the ordinary course of commerce occasioned by the Second World War, the new trade policy appeared to be rather successful. In 1936 imports from countries with which agreements had been consummated increased nearly twice as fast, and exports nearly three times as fast, as our foreign trade with other countries.[4] Similar results can no doubt be expected in the postwar period. The bargaining procedure involved in making reciprocal agreements has given the United States a powerful weapon for reducing trade barriers. It is true that the process of negotiating a new treaty one product at a time is most time consuming.

[3] Paul T. Ellsworth, *International Economics*, Part II, Chapter 7.

[4] Ibid.

A more direct and comprehensive approach to freer trade by more general international cooperation is needed, but the trade agreement method is now established, and the State Department can work within that authority without interference. The opportunity thus opened should be vigorously exploited.

The Genesis of Bretton Woods.—The greatest threat to a healthy revival of world trade at the close of the Second World War was the risk of acute economic conflict—especially a widespread currency war. The gold standard had disappeared and been replaced by more or less rigidly managed paper currencies. Responsible governments feared the strains that might be caused by external influences on their internal economies, which were controlled by such devices as price fixing, rationing, and allocation of resources. An appalling lack of the materials and equipment needed to rebuild for peace faced many nations. The full force of such economic conditions falls on foreign exchange rates and the international investment market. We observed in Part B, above, the importance of the relation between internal and external price levels. Other things being equal, a rise in the dollar price of English pounds makes it cheaper for Englishmen to buy needed goods in the United States; the pound has more purchasing power abroad, so that imports into England would be stimulated. In a similar manner, a fall in the dollar price of the pound would decrease the purchasing power of the pound, discouraging importation, but stimulating British exports, since England would then become a cheap place in which to buy goods with dollars. The determination of exchange rates among the various world's currencies was therefore of critical importance for each nation's postwar aspirations. The ability to borrow abroad was almost equally urgent. With production and exports at low levels, much of the hope for prompt rebuilding of industry was dependent upon the ability of the war-torn countries to import materials and equipment, financed by long-term foreign loans. Nationalistic controls are impotent to meet these conditions; international cooperation was essential for the resumption of world trade.

It was against this background that forty-four nations met at Bretton Woods in July, 1944, in a historic and bold attempt to meet a world trade problem by international cooperation. The Bretton Woods Agreements worked out by the conference provided for the establishment of two organizations: an International Monetary Fund, designed to promote stability in exchange rates, and an International Bank, designed to facilitate and guide long-term international investments for productive purposes. We shall be in a better position to understand the role of the Bank after a study (in the next chapter) of the whole problem of international finance. At this point it is the Fund that requires our attention.

The International Monetary Fund.—The International Monetary Fund is intended to promote freer and wider international trade by a program of

international monetary cooperation and foreign exchange stabilization. It is hoped that it will eliminate such restrictive and discriminatory practices as competitive currency depreciation, bilateral clearing agreements, and direct foreign exchange controls. It is recognized that some controls may have to be retained during the period of disturbed conditions that accompany the transition from the Second World War to peace, but the Fund can require the removal of these controls on the part of its members when, in its opinion, they are no longer necessary. The participating nations have agreed to define the parities of their respective currencies at certain rates in terms of gold or of American dollars, and thereafter to limit variations in their exchange rates to not more than one per cent from these pars If it should appear that the established par in a given case is not compatible with fundamental equilibrium of trade for the country concerned, it may change the par by an amount not exceeding ten per cent, after consultation with the Fund Changes exceeding ten per cent cannot be made without the Fund's express permission. This provision is expected to prevent competitive currency depreciation.

In order to prevent excessive fluctuations of exchange rates, the Fund is provided with a huge stabilization appropriation, contributed by the various members, the quota for each member having been determined on the basis of the country's national income, prewar trade volume, and monetary gold stocks[5] The subscriptions took the form partly of gold, and partly of credits in the member countries against which the Fund could draw bills of exchange as needed. These resources can be used to stabilize exchange rates in the following manner: Suppose that a crop failure in Argentina this year sharply reduces its exports of grain for a season, so that it no longer has a large enough supply of foreign bills to pay for its normal imports of foreign goods. Without the Fund, foreign exchange might rise to a high premium in Argentina, and Argentine bills would fall to a low discount abroad. Now this need not happen, for Argentina can apply to the Fund for a loan. By drawing on its foreign credits, the Fund can supply Argentina with such foreign exchange as it needs, thus preventing exchange rates from being seriously disturbed, and making it possible for Argentina to buy its usual amount of imported goods. Serious trade dislocations are thereby prevented. Next year, when crop conditions in Argentina improve, it can build up its credits abroad until it has a surplus of foreign exchange with which to reimburse the Fund for its loan. The amount that a country can borrow from the Fund in any twelve-month period is limited to 25 per cent of its quota, and the total of its accumulated borrowings must never exceed twice the amount of its quota

It must be made clear that the Fund can deal successfully only with short-

[5] The initial resources of the Fund were set at $8,800 million The larger quotas were: United States, $2,750 million Great Britain, $1,300 million, U S S R, $1,200 million, China, $550 million, France, $450 million, India, $400 million, Canada, $300 million

run, temporary dislocations, it cannot correct long-run, permanent alterations in the trade balance between one country and the rest of the world For instance, if there should be a permanent decline in the world demand for Argentine products, so that it could no longer expect its sales abroad to pay for its former volume of exports, it would not be able to repay any loans extended to it by the Fund, and the Fund would soon be put in a position where it would be forced to refuse it further credits. Argentina would simply have to adjust its economy to its changed world situation. The Fund is not designed to prevent such changes in fundamental trade relations, but it can aid the process of transition so that it can take place in an orderly manner without abrupt and severe disturbance

Since in the immediate postwar situation the United States is the country whose exchange will be in strong demand, the result of the Fund's operation in its early years will be, in effect, the making of short-time loans by this country to other member countries needing American goods; for the Fund will be drawing on its American credits to supply United States bills to nations whose exports do not balance their imports from this country. It is hoped, however, that this situation will not be permanent. In time, presumably, the various nations will put their economies in order, and the various obstructions to world trade will be removed to an extent sufficient to permit the re-establishment of normal world trade. The Fund gives a breathing spell for this process If it is not utilized to accomplish the end result described, it will fail It is based on the assumption that habits of international cooperation will be developed if it provides suitable machinery.

Suggestions for Future Policy.—Government interference must share heavily in the blame for the collapse of world trade. No doubt a case can be made in defense of each restrictive act, as every step was taken for what appeared at the time to be urgent and valid reasons Many persons sincerely believe that internal economic conditions might have become far more serious if international trade had not been sacrificed. There are times when the finest physician finds it necessary to prescribe dangerous drugs to save a patient's life But this defense should not be used to block the return to a more efficient world economy We must attack the problem of trade barriers vigorously and promptly. This need not mean a return in the near future to the degree of freedom existing in 1914 The technical machinery of nationalistic controls has become so integral a part of the politico-economic organization of the modern state that it is difficult to believe this new power will be easily and completely surrendered. However, there is no good reason why governmental controls need *obstruct* trade. On the contrary, wise policies of control would facilitate it This will require concerted action by the great powers The United States must lead the way because it emerged from war in the strongest economic position. Our policy should be· (1) immediate and substantial reduction in our protective tariffs, in return for

reciprocal action by other countries; (2) complete support of the International Monetary Fund; (3) encouragement of international cooperative action for controlling the distribution of raw materials; (4) full support for a program of restoring industrial production abroad by a wise and liberal extension of foreign loans, for without a return to normal economic life in all the nations brought near to ruin by war, there is no hope for free and general world trade revival. The last of these recommendations will be developed more fully in the next chapter.

This program should begin at home by courageous reorganization of our tariff making procedure, to the end that, whatever the final schedule of rates may be, it will reflect the interests of our country as a whole rather than those of particular selfish pressure groups.

SUMMARY

The relative freedom of trade that prevailed prior to 1914 has been interfered with in the contemporary world by various restrictive controls. These lessen geographical division of labor and so reduce the world's income. International trade is an exchange of goods for goods which, if freely permitted, utilizes the resources and capacities of each region most efficiently, giving to each the advantages of specialization. Protective tariff duties, by freeing domestic producers from foreign competition, encourage the development of industries in which we are at a comparative disadvantage, resulting in high production costs which force consumers to pay higher prices.

Many arguments advanced in favor of tariff protection are clearly fallacious. The balance of trade argument, that an excess of exports over imports is "favorable" to a nation (because it is supposed to bring in money), ignores the fact that imports are foreigners' means of paying us for our exports, and that in the long run the two must be equal. The home-market argument falsely assumes that an additional market for farm products is created by tariffs on manufactured goods, overlooking the fact that the home market is merely substituted for a foreign market which is lost because of our refusal to buy imports with which the foreigners could buy our goods. However, there is some validity to the reasoning that a home market may be more stable than a foreign one. The high-wages argument falsely assumes that the demand for labor is increased by tariffs, again overlooking the loss of foreign demand for our goods, and it ignores the fact that high real wages depend on high productivity. High money wages do not necessarily mean high labor costs per unit of product. The argument that tariffs increase employment again fails to recognize that an additional industry is not created, but that one industry is merely substituted for another.

Valid arguments for protection must admit the economic cost involved in reduced real income, but may point to certain allegedly compensating

gains. For instance, there is some truth to the claim that free trade may result in a country's specializing its industries too narrowly; tariffs diversify industry and so add to stability. There is also some merit to the argument that a nation should be self-sufficient, so long as the danger of war exists. Protection against dumping is likewise valid in principle, although difficult to carry out in practice. If we must protect industries, bounties (subsidies) are preferable to tariff duties because they are direct and open.

State control over foreign trade has increased markedly throughout the world since 1929, many new techniques being added to older ones. Quota systems limit imports to certain specified amounts, or to certain percentages of former quantities. Currency depreciation is used to stimulate exports for short periods, which it does because internal price levels do not respond to the depreciation as quickly as do foreign exchange rates. Long-period control over exports and imports has been accomplished by direct governmental restrictions on the purchase and sale of foreign exchange, by regulation of exports on the part of countries supplying raw materials to other, highly industrialized nations, and by cartel agreements for dividing world markets, fixing outputs and prices, or suppressing competition of new firms.

The struggle for freer trade should begin with a reform of tariff-making procedure in this country to reduce the influence of lobbies representing special interests. A strong independent tariff commission is needed. International coöperation is also necessary. Reciprocity treaties, with "most-favored-nation" clauses, are a step in this direction, since their benefits are automatically extended to other countries. We should expand our reciprocal trade agreements program. The International Monetary Fund, by its machinery for preventing competitive currency depreciation and protecting foreign exchange rates against wide fluctuations, should also help to promote increased trade. The United States should assume a position of leadership in these matters.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

The excellent little volume of Calvin B. Hoover, entitled *International Trade and Domestic Employment* (1945), should be required reading for students of current international trade problems; Chapters I, II, IV, V, VIII, and IX deal directly with the subjects covered in the present chapter. For a competent analysis of the economic background of the present world trade muddle, see W. Röpke's *International Economic Disintegration* (1942). Postwar problems and policies are analyzed in a scholarly manner by J. B. Condliffe and A. Stevenson in *The Common Interest in International Economic Organization* (1944), a study of the International Labor Office. United States Department of Commerce Trade Information Bulletin No. 812, *Foreign Tariffs and Commercial Policies During 1932*, is very useful for background material. For more detail on the monetary problems of world trade see C. R. Whittlesey, *International Monetary Issues* (1937). An excellent short review of the postwar trade situation is that of P. T.

Ellsworth in "The Bases of An Economic Foreign Policy," published as Chapter VI of a symposium. *Problems of the Post-war World* (1945), edited by T. C. T. McCormick.

The writings of Frank W. Taussig still merit first position as studies of theory and practice in the field of international trade. For this chapter see especially his *Tariff History of the United States* (eighth edition, 1931), *Free Trade, the Tariff, and Reciprocity* (1924), and *Some Aspects of the Tariff Problem* (third edition, 1931).

A number of excellent texts covering the entire field of international trade are available. *International Economics* (1938) by P. T. Ellsworth, is especially strong in theory and analytical materials. This work was helpful in writing certain paragraphs of the present chapter. Broader in scope is the excellent text by J. P. Young, *International Trade and Finance* (1938). We have relied principally upon B. B. Wallace and L. R. Edminster, *International Control of Raw Materials* (1930), for our discussion of that topic.

CHAPTER XVII

International Investment, War Debts, and Economic Imperialism

A. International Investment

How International Investments Arise.—In the everyday transactions of economic life, some people have more money than they feel it necessary to spend for their immediate needs. Being thrifty, they save the surplus, which thus is made available for investment. There are others who, for one reason or another, feel a need for more money than they can command out of their own resources. This is especially true of business enterprisers, who see opportunities for profitable business ventures if they can obtain sufficient funds to finance them. They are willing to share their profits with those who have savings, if the latter are willing to invest funds in their enterprises. So, loan or investment transactions arise, in which the savers advance funds to the enterprisers in exchange for some kind of credit instrument or claim, such as stocks, bonds, and mortgages.

These loans or investments can be for either a short or a long term. For instance, a businessman may borrow for thirty, sixty, or ninety days in order to finance the purchase of raw materials, or he may float a ten-year bond issue to provide durable equipment for a factory. In the case of short-term loans, the funds are most likely to be provided by a commercial bank. In long-term financing, an investment or savings bank may enter into the transaction as an intermediary, but the funds really come from the savings of the investors who ultimately purchase the securities.

Now, transactions of this kind can take place across international boundaries almost as readily as within a single country. For instance, an American oil company can ship oil in tankers to a foreign buyer and accept the buyer's promissory note in lieu of immediate payment. Thus, the oil exporter has made a loan to the foreign importer. In this case the loan will most likely be for a short term; but there also can be international long-term transactions, as when an American investor purchases the ten-year bonds of a foreign industrial firm. These transactions can take place in both directions. For instance, it is entirely possible for an American firm to be selling goods on credit to British buyers at the very time when some British investor is purchasing American securities. Thus, in the normal course of international

trade, foreigners accumulate investments in the United States, and Americans accumulate investments abroad. Not only do private individuals or corporations in one country lend to or borrow from those in other countries, but there may be international loans between governments. During both world wars, for example, the United States government made huge loans to its European allies to enable them to purchase war goods here.

In the balance of international payments, these loans and investments appear as invisible items, to be counted in with the visible items. If the people of one nation (or their government) are generally investing heavily in securities or notes in other nations, this gives the borrowers a temporary supply of exchange on the lending country. The borrowers are likely to use this to buy goods in the latter. Then, the lending country will be exporting goods to the borrowing country in exchange for credit claims against the latter. An excess of commodity exports on the balance sheet of the lender will then be offset by its purchases of foreign notes or securites. Thus its export surplus becomes the material embodiment of its investments abroad. It is literally exporting capital. Conversely, on the balance sheet of the borrowers, an excess of commodity imports will be offset by its sales of notes or securities to the lending country. It is really buying the goods on credit. So, the capital funds transferred from one country to another in the process of international investment will usually not take the form of cash but, in most cases, will be effected by actual movements of goods. However, if there is a net balance that cannot be offset by commodity or service transactions, the difference may be paid in gold.

Debtor and Creditor Positions in Relation to Trade Balances.—If a nation's total liabilities in its capital account with the rest of the world exceed its capital assets (that is, if the sums which have been invested in it by foreign nationals or governments exceed the accumulated investments of its own people or government abroad), it is said to be a *debtor nation*. Conversely, if its accumulated investments abroad exceed the amount of foreign investments in it, it is called a *creditor nation*. Each of these two categories is further split into two subdivisions, making four possible positions, or phases, in which a nation can be with respect to its foreign investment account. These phases are known as the *immature debtor*, the *mature debtor*, the *immature creditor* and the *mature creditor* positions. Let us consider each one of these in turn.

A country which is relatively undeveloped economically, but which has potential resources for manufactures, offers a good prospect for profitable investment in railroads, factories, and other industrial equipment. However, such a country is likely to be too poor to provide for the rapid development of these facilities out of the savings of its own people, and therefore will probably look to foreign investors for the necessary funds. Foreign capitalists may then purchase the securities of its corporations in considerable quan-

tities, or the foreigners may organize companies of their own to come into the region and exploit its resources. During the nineteenth century much British capital flowed into Asia, Africa, South America, and the United States in this way. Today American funds are flowing similarly to South America, China, and elsewhere. As long as the new investments annually flowing into the undeveloped country exceed its outgoing payments to the foreign capitalists for interest, dividends, and amortization, the nation is in the immature debtor position. It was explained above that the inflow of funds will give rise to commodity imports. An immature debtor nation, therefore, will usually have a surplus of imports over exports in its merchandise trade balance.

If the investments in the debtor country prove to be profitable, they will presently begin to yield interest or dividends, and, as bond issues mature, some of the principal will be repayable. This sets up a flow of payments in the opposite direction—from the debtor to the creditor nations. At first these outgoing payments will not be as great as the annual inflow of new investment, but in time they will come to exceed it. When this point has been reached, the nation becomes a mature debtor. Just as the net inflow of investment funds previously caused an excess of commodity imports, so the net outflow on investment account will now tend to cause a surplus of exports. The payments will give the foreigners claims on the debtor country, and they will use these claims to buy its goods. The amount of the surplus should be approximately equal in value to the *net* outgoing payments of interest, dividends, and maturing loans.

A wealthy country is more likely to be a lender than a borrower, hence it will be a creditor with respect to other countries. In the early stages of its career as a creditor, its investments abroad will be the source of outgoing, rather than incoming, payments. As long as this continues, it is an immature creditor. Such a nation will tend to have an excess of commodity exports over imports because (as above explained) the outflow will take the form of goods.

If the investments abroad prove to be profitable, they will sooner or later begin to yield a return of interest, dividends, and repayment of principal on maturing bonds. This sets up a flow of incoming payments, which in time may come to exceed the outflow of new investments abroad. When this point has been reached, the nation becomes a mature creditor. Now its merchandise trade balance will shift from an excess of exports to a surplus of imports. It will be receiving foreign goods as its reward for the aid it has previously given toward the development of the debtor countries.

The fact that this flow of imports, which increases the real income of the creditor nation, is the fruit of its past saving and investment, reveals how nonsensical is the popular notion that an import balance is an unfavorable one. Great Britain for many years was able to maintain its people at a higher

standard of living than most other countries, partly by virtue of the goods which its debtors were obliged to send to it because of their debt to British investors. The debtors had so-called favorable balances because of these payments, but the advantage was clearly on the side of Great Britain. The debtor countries were giving up part of their product, at the expense of their people, to enrich the people of England.

These four possible positions in a nation's investment relations with the rest of the world are illustrated nicely by the foreign trade history of the United States. We began as an immature debtor, back in colonial times. Our early factories, and later our railroads, were financed largely by European (especially British) capitalists. We used the credits so put at our disposal to purchase British manufactured goods, such as textile machinery and railroad equipment. During these years our imports exceeded our exports. Gradually, as our industries developed, they yielded a good flow of interest and dividends to the foreign investors, until, in 1874, these outgoing payments came to exceed the inflow of new investments. In that year we had, for the first time, an excess of exports. We had become a mature debtor. We continued in this position until the First World War. During this conflict our European allies were forced to borrow heavily from our government, so that our loans abroad now became the dominant element in our investment account. We had become an immature creditor. This gave us a continued excess of exports over imports, because the sums we loaned our allies were used to purchase war goods here. After the war, had the Allied nations been able to pay us the sums due on these debts, we would have become a mature creditor, but conditions compelled them to default. Meanwhile, during the interwar period our industrialists sold large quantities of goods to foreign buyers on short-term credit, so that we were continuing to make heavy investments abroad. In the Second World War our government made further loans, in greater volume than ever, and after the war further credits were extended for relief and reconstruction in Europe. Thus we have remained an immature creditor, and as a result, have continued to have an export surplus. If we could ever receive interest and even part of the principal on all these loans, we would be a mature creditor, and our trade balance would change to a surplus of imports.

To summarize: An immature debtor nation is one whose annual sales of securities and notes abroad exceeds its annual payments of interest, dividends, and maturing loans. It tends to have an import merchandise trade balance. A mature debtor nation is one whose outgoing payments of interest, dividends, and maturing loans exceed its annual sales abroad of securities and notes. It tends to have an excess of commodity exports. An immature creditor nation is one whose annual purchases of foreign securities and notes exceed its receipts of interest, dividends, and principal from previous foreign investments. It tends to have an excess of commodity exports. A mature

creditor nation is one whose receipts of interest, dividends, and principal from past foreign investments exceeds its new purchases of foreign securities and notes. It tends to have an excess of commodity imports.

The Mechanism of Adjustment.—The process by which trade balances are actually altered through foreign investment transactions can be understood most easily by tracing the effects of a new loan. To simplify the explanation, let us assume that exports from the United States to England just balance imports, and let us further assume that these two countries trade only with each other. Suppose now that English business interests float a large bond issue in the United States. According to the principles just explained, the United States would then become an immature creditor nation and should develop a so-called favorable balance of trade; that is, it should export more commodities than it imports. How will this condition be brought about?

If the British bonds are offered for sale in the American market, buyers in this country will pay for them in dollars, by drawing checks against their bank accounts to the order of the sellers. This will give the English corporations that issued the securities deposits here against which they can draw. So, a supply of United States exchange will become available in England. If Americans seek to buy the securities in the English market, they will have to purchase English exchange in order to make payment in pounds. So, there will be either an increase in the supply of United States exchange in England, or an increase in the demand for English exchange in this country, or both. This will cause American exchange to fall to a discount and English exchange to rise to a premium. Now these changing rates of exchange will have the effect of stimulating exports from the United States and discouraging imports into the United States. This will be true because the pound, being at a premium, will exchange for more dollars than previously. Englishmen will find that pounds will temporarily buy more in the United States, and Americans will find that their dollars will temporarily purchase less in England. Under paper money standards, these effects would be pronounced enough to bring about the necessary adjustment of trade. Goods would move from the United States in sufficient amount to balance the investments. We would have a surplus of exports just equal to our purchases of British securities.

If the two countries had automatic gold standard monetary systems, the mechanisms would be somewhat different, although the end result would be the same. With gold standards in effect, exchange rates do not fluctuate very widely. Before they can move very far, gold movements occur. The premium on the pound would induce the exportation of gold from the United States. This would lower the price level in the United States and raise the price level in England, making England a poor place for Americans to buy, but making the United States a good place for Englishmen to buy,

These changes would have a tendency to stimulate exports from the United States and reduce imports into it, and there would develop an excess of exports over imports. The "favorable" trade balance which is necessary would become established. So, if we look behind the technical mechanism of exchange, we find that Americans have been exporting larger quantities of goods in exchange for foreign securities

The adjustment of trade balances to investment transactions does not always take place in just the manner above described. Sometimes the movement of goods arises directly out of loan transactions, without changes in exchange rates or price levels For instance, a Chinese railroad corporation may offer bonds for sale in the United States for the special purpose of buying locomotives here When the securities are sold, the dollars received will be used at once to pay for the locomotives and the latter will be exported from this country as a direct result of American investments in the bonds In like manner, during both world wars our government made huge loans to its European allies for the express purpose of enabling them to buy war goods from American manufacturers Great quantities of exports to Europe followed

The normal mechanism of adjustment may be interfered with by the various restrictions on foreign exchange dealings and the other barriers to trade described in the preceding chapter. Also, long-run adjustments may be distorted or delayed by short run influences of an extraordinary, and some times erratic, kind We have already referred to the position of the United States after the First World War Our loans to our allies during this conflict were so large that, had we been paid the interest due us, we would have been in a mature creditor position, and would have developed an import trade balance; but the debtors were unable to pay, hence this result did not occur Meanwhile, our manufacturers were selling large quantities of goods to European buyers on short term credit (because the buyers were unable to pay for them), so that we continued to have a great excess of exports. Again, in this same period, political and economic conditions in Europe were so disturbed that people of means over there, fearful that their wealth would be lost by financial upheaval or political revolution, turned many of their assets into cash and made frantic efforts to transfer their funds to the United States, where they felt the money would be safe. This "flight of capital" (as it is called), if long continued, would tend to produce a flow of imports into this country, but it would take a considerable time to bring such a result about The movement was too sporadic and short-lived to accomplish such a result in the interwar period; besides, Europe's industry had not recovered sufficiently to provide a large flow of exports, and our tariff policy tended to prevent imports into this country. The offsetting factors of relief payments from the United States to Europe, and the extension of short-term credits just referred to, helped to balance the accounts without the necessity of

imports. Therefore, the results that might have been expected did not occur Yet another factor that complicates the process of adjustment is the operations of international bankers and foreign exchange speculators. These business men watch closely the movements of interest and foreign exchange rates in the financial capitals of the world, and are quick to transfer their funds from one country to another (by purchase or sales of foreign bills of exchange) whenever they see an opportunity to profit by so doing. Since these operations are temporary and shifting, they change too rapidly to produce permanent adjustments and may, for a time, run counter to the deeper underlying forces of the foreign investment market.

All these influences obscure the effects of long-run adjustments, but do not necessarily destroy them. Underneath the superficial fluctuations of the short-time money market, the more fundamental forces of long-term investments and commodity movements are at work. If these are of sufficient magnitude and permanence, they must make themselves felt sooner or later, but the picture at a given moment is a composite of short-run and long-run influences that is difficult to unscramble.

The Foreign Investment Position of the United States.—Just before the First World War, foreign holdings of American securities had reached a total estimated at $5,500,000,000, which necessitated payments of interest and dividends to foreign investors on the part of American enterprises amounting to about $275,000,000 annually. American investments in foreign securities amounted to approximately $1,500,000,000, on which interest and dividends receivable were only $75,000,000. We therefore had to pay a net balance of about $200,000,000 in interest and dividends. We were a mature debtor nation. During the war, heavy demands were made on American industry for war munitions and other war supplies. Exports expanded by leaps and bounds. Between 1914 and 1919 the excess of exports over imports had reached a total of over $15,000,000,000. This huge export balance was not paid for by Europe in cash or goods. It was financed partly by the resale in this country of United States securities formerly held in Europe, and partly by new loans floated in the United States. These transactions put us suddenly in an immature creditor position. Some of the loans were marketed privately by banking institutions, but the bulk of them were direct loans made by the United States government to its allies. These government loans, totalling over ten billion dollars, were placed to the credit of the various borrowing nations and were drawn upon gradually by them for the purpose of purchasing supplies in the United States. So we actually loaned, not money, but commodities. Like any other immature creditor, we had a surplus of merchandise exports. Our government obtained the necessary funds to make the loans by the sale of Liberty Loan bonds to American citizens We shall learn below that this intergovernmental indebtedness was (with minor exceptions) never repaid. It remains in default at present writing.

In the decade of the nineteen twenties, private foreign investments by American citizens increased at an astonishing rate These investments would have sufficed to make us a creditor nation, even without the intergovernmental war debts. By the end of 1930 the net credit balance, war debts excluded, totaled $8,800,000,000. Three years later, in 1933, the all time high in our creditor status was reached. at $9,500,000,000. During the depression years of the nineteen thirties the net credit balance declined. This downward trend is worthy of serious study, for such study will correct many widely held misconceptions.

In the accompanying table, observe that our net credit balance fell from the high point given above to a low of only $1,486,000,000 in 1940, approximately 15.5 per cent of the 1933 figure. Then note the steady, sharp rise in the

THE FOREIGN INVESTMENT POSITION OF THE UNITED STATES, 1934 TO 1940
(In Millions of Dollars)

	1934[1]	1938[2]	1939[2]	1940[2]
U. S. Investments in Foreign Countries				
Long Term	12,296	11,070	10,895	10,771
Short Term	1,234	689	595	410
Total	13,530	11,759	11,490	11,181
Foreign Investments in the U S				
Long Term	4 943	6,470	6,290	5,717
Short Term	679	2,231	3,296	3,978
Total	5,622	8,701	9,586	9,695
Net Creditor Position of U S.	7,908	3,059	1,904	1,486

total of short-term foreign investments in the United States. This represents the "flight of capital" which was mentioned above It took the form of bank balances established here, through the purchase of American bills of exchange, by worried foreigners. The decline of United States short-term foreign investments in this period was due to similar factors Americans did not want to hold funds in Europe because of the disturbed conditions It is clear from these data that the extent of the creditor position of the United States has been greatly exaggerated.

This conclusion also holds for our investment position at the close of the Second World War. An estimate as of December 31, 1945, indicated that (omitting lend-lease contracts) the United States at that time was a net

[1] Data from *The Balance of International Payments of the U S in 1939*, United States Department of Commerce, Economic Series No 8 (1940)

[2] Data from *The Balance of International Payments of the U S in 1940*, United States Department of Commerce, Economic Series No 17 (1941)

creditor on long-term account by over five billion dollars, but a net debtor on short-term account by over seven billions. Combining the two, it appears that *we were a debtor nation* to the extent of two billion dollars.[d] These figures came as a great shock to many who had believed we were in a strong creditor position. New foreign loans by the United States government, authorized and projected, will reverse this situation drastically, but it is important for us to realize that the new loan structure was not added to a top-heavy net credit balance. Therefore, the possibilities and consequences to be anticipated in the decade following 1945 can be faced with greater confidence in the ability of the trade balance to stand the strain.

B. Issues and Policies of International Government Finance

The Transfer Problem.—The ability of a nation to make a new investment in, or repay a debt to, a foreign country is not simply a matter of having a sufficiently large national income and being willing to remit. It is a matter of having the means by which payments can be made. There are only three such means. Either the payment must be made in gold, or by the exportation of commodities, or by the performance of services (such as carrying freight or entertaining tourists). Payments in gold, even in gold standard days, were always more or less limited by the fact that each country needed to keep a considerable stock of gold in its monetary reserves if monetary stability was to be preserved; therefore, it was not considered sound practice to allow too much gold to leave a country. Such payment is much more limited today by the fact that, under the exigencies of two world wars, a large proportion of the world's gold stocks were perforce sent to the United States, in payment for urgently needed goods, and are now held here. This has resulted in a situation where we could make large payments of gold to other nations if necessary, but they cannot pay much more gold to us. The method of gold payments has become a one-way street. Consequently, if other countries are henceforth to make new investments abroad, or pay out interest, dividends, and maturing principal, they can pay only in commodities or services. To do this, they must somehow build up an excess of exports over imports. Conversely, any country that wishes to borrow, or to receive interest, dividends, etc., on its past investments abroad, must adjust its economy to a so-called unfavorable trade balance—its imports must exceed its exports.

A marked change in a nation's trade balance is a very serious matter, for it disturbs the relative positions of its major industries and economic classes. Some of these will be profitably stimulated, while others, subjected to the competition of imports from abroad, may be injured. Political repercussions are certain to follow. For these reasons the settlement of a large

[d] *Eighth Report of United States Congressional Committee on Postwar Economic Policy and Planning*, February, 1946, Part 2

foreign debt or the payment of war reparations usually proves to be an extremely delicate and difficult task. The problems of settling war debts owed to the United States following the First World War, and the payment of German reparations to the victorious Allied Powers, furnish excellent historical demonstrations of the issues and difficulties involved.

Debt Settlement Problems after the First World War.—At the close of hostilities in 1918, our government held demand notes, signed by the official representatives of the debtor countries, amounting to more than ten billion dollars. The settlement of these obligations was a two-sided problem. Since a large part of the world's gold stocks had already been transferred to the United States, as above explained, the European debtors could not pay us in gold. If they were to pay us at all, it would have to be in goods. This would have meant that we would have had to receive a volume of imports so large as to overturn our long-established export trade balance. This could have been accomplished either by increasing imports much more rapidly than exports, or by reducing exports drastically, or by reducing exports slightly and increasing imports sharply In any case, it would have required a complete reversal in our traditional tariff policy because it would have been necessary to lower tariff rates to permit the inflow of imports. If we were not willing to do this, we were faced with the distasteful alternative of giving up all prospect of collecting the sums due us. The debts would have to be cancelled, in whole or in part.

The merits of these alternatives were hotly debated. In favor of cancellation, it was argued that the sums loaned the Allies should be considered the American contribution toward winning the war. By financing the supplies of our allies we shortened the war and were spared the necessity of placing a large army in the field to win victory at heavy cost in American lives Protectionists argued that our own self interest necessitated cancellation, for they believed the effect of a heavy inflow of foreign goods would be disastrous to American industry. It was said that the debtor nations were in approximately the same stage of economic development as the United States and, therefore, that the goods that would be exported to us would enter into direct competition with established American industries. The products we supplied during the war were cannons, shells, powder, wheat, and the like, but the products we would receive in repayment would be textiles, cutlery, machinery, and similar manufactured goods. This would be very hard on domestic industries engaged in making these products. Finally, practically all economists who studied the problem, whether they were American, English, French, or German, agreed that it was very doubtful whether the loans could be repaid in any event, even if the debtors made every conceivable attempt at payment and the creditors extended every opportunity for accepting it. The shifts required in international trade balances were believed to be too great for settlement in full.

A Solution Dictated by Necessity.—In spite of these arguments, the avowed attitude of our government was that the war debts of our allies should be repaid. However, it was apparent at the close of hostilities that the debtor nations could not make payment in conformity with the original terms of the loans. All parties agreed that some adjustments in the original terms were necessary to facilitate repayment. Accordingly, thirteen agreements for the funding of the debts were negotiated between May 1, 1925, and May 3, 1926, by the World War Foreign Debt Commission, acting under special congressional authority. Other agreements were negotiated subsequently by the Secretary of the Treasury. In writing the new agreements, the commission took into consideration the capacity of each debtor to pay. In most cases the principal sum was not changed, but the interest rates were materially reduced The original loans were at five per cent interest, but under the agreements this was reduced to a general average of approximately two per cent. Payments were to be spread over a period of sixty-two years. Since little had been paid, either to the account of principal or interest, it was necessary to fund accumulated interest along with the principal.

Events of the years that followed vindicated the position taken by those who advocated a lenient debt policy. Payments received by the United States were not large enough to cover accumulated and accumulating interest[4] In other words, the net total indebtedness increased rather than decreased. The Hoover Debt Moratorium gave relief for one year, but when the agreement terminated on June 30, 1932, several debtor governments gave notice of their intention to postpone payment in whole or in part. Only six countries made the payments due on December 15, 1932. A concerted movement then developed abroad demanding general revision. In the interim President Roosevelt accepted "token" payments of ten per cent. The Johnson Act, in April 1934, forced the issue by prohibiting the granting of new loans to any foreign government which was in default of its obligations to the United States government. On June 15, 1934, all of the debtors were in complete default, with the exception of Finland, which country paid in full. This unfortunate condition continued through 1946 The cold realities of the economic adjustments necessary to achieve large transfer payments proved too burdensome to be accepted, irrespective of established government policies.

The Reparations Transfer Problem of the First World War.—The history of the Allied efforts to obtain reparations payments from Germany after the First World War gives us another illustration of the difficulties of transferring extraordinary sums from one country to another. It should be carefully analyzed by all who would presume to advise on international capital movements.

By November 1937, the payments received totaled $2,736,251,265, but the total debt had increased to $12 796,196,128

When Germany laid down her arms at the signing of the armistice in 1918, she agreed to pay for all damage done by her armies to civilian populations and civilian property. A Reparations Commission, in 1921, fixed the amount that Germany should pay at 132,000,000,000 gold marks. Interest and sinking fund charges on such a sum would amount to nearly $1,900,000,000 annually. We have already seen that payments by one country to another can be made normally only by means of an excess of exports over imports. In order to pay reparations, the German government would have to secure drafts on foreign countries. These drafts would normally not exist unless goods had been exported from Germany to other countries, giving rise to claims of German exporters on foreign importers. Economists believed, from the time of the announcement of the sum agreed upon as Germany's obligation to the victorious Allies, that it would be impossible for Germany to meet the obligation. Even if German internal economic conditions were such as to make it possible for the government to obtain control over wealth within Germany sufficiently large to meet payments, it would be impossible to transform that wealth into a form that could be used to make payments abroad. Not only was the sum demanded enormous, but the ability of Germany to pay had been impaired by the war. She had lost some of her most valuable territory, had been forced to give up her merchant marine, and was faced with economic trade barriers all over Europe. At one time Germany offered to rebuild part of northern France by bringing in German labor and German materials, avoiding thereby the difficulty of making payments through trade channels, but French businessmen protested so strongly that this method of meeting her obligations was abandoned. Attempts to increase German exports were strenuously resisted in the Allied countries. Some payments were made by resorting to the very questionable device of inflating the currency. The German government printed large issues of paper marks and gullible investors throughout the world (but especially in the United States) purchased them as a speculation. This gave Germany a supply of exchange on foreign countries with which to make payments. The amount of these foreign purchases of German paper money roughly equalled the actual payments made by the Germans to the Allied Reparations Commission up to 1925. The speculators in this money lost all they put in, for the mark depreciated until it became almost worthless. Germany was forced to default its payments time and time again.

As it became increasingly evident that it was impossible to collect the claims against Germany, there followed a series of actions among the Allies in which the amount of the reparations was successively reduced. There was the Dawes plan (adopted in 1924), which arranged for a gradually increasing scale of payments, based on the anticipated economic recovery of Germany; the Young Plan (1929), which fixed a series of annual payments of specified amounts to be continued over a fifty-nine year period: the Hoover

Debt Moratorium (1931), which, under the threat of an imminent world financial collapse, provided for a general suspension of intergovernmental debt and reparations payments for a period of one year; and finally, the Lausanne Settlement of 1932, which abandoned the annual payments called for under the Young Plan, and provided for Germany to meet its reparations debt by delivering three billion marks of German government bonds to the Bank for International Settlements (which had been created under the Young Plan). It was then up to the bank to sell these bonds in the creditor countries if it could. We need not go into the details of these efforts to accomplish the impossible. It is enough to say that the Lausanne Settlement practically liquidated the reparations. The entrance of Hitler into the German political scene shortly thereafter completed the work. The reparations were never paid in very large amounts, and never will be. The whole matter has been completely superseded by the somewhat different reparations problem which arose after the Second World War. This will be explained below.

The Lend-Lease Program.—With the outbreak of the Second World War, the United States again felt it necessary to help the powers which were fighting against Germany, even though we were not at first direct participants in the conflict. The question then arose, would our aid take the form of definite loans, which the borrowing nations would be committed to repay? Or should it be in the nature of gifts donated in the interest of our own security? If the aid took the form of loans, it would create, after the war, the same sort of vexatious situation that followed in the wake of the First World War. On the other hand, there was too much opposition in this country to permit our advances to be made as outright gifts. The result was a compromise, in the elastic Lend-Lease Act of 1941. This law authorized the President to "sell, transfer title to, exchange, lease, lend, or otherwise dispose of" any "defense article," within certain limitations, "to the government of any country whose defense he deems vital to the defense of the United States." The method of final settlement was intentionally left very vague. The terms and conditions for granting aid were to be prescribed by the President, and "the benefit to the United States may be payment or repayment in kind or property, or any direct or indirect benefit which the President deems satisfactory."[5]

The Office of Lend-Lease Administration was established to put this law into effect. Thereupon we began to advance supplies to Great Britain and its allies in large quantities. By the time operations were brought to an end in September 1946, over-all lend-lease deliveries had amounted to more than 50 billion dollars. Since foreign government advances of supplies to our military forces abroad (reverse lend-lease) totalled about 10 billion dollars, the net sum due on the lend-lease account was approximately 40 billions.

[5] The quotations are from an excellent article by Eugene Staley, entitled "The Economic Implications of Lend-Lease," in *The American Economic Review Supplement*, March, 1943, p. 362.

This legislation was an ingenious attempt to profit by the unhappy experience with debt settlements following the First World War. The United States was to lend, not dollars, but planes, tanks, military trucks, food, shipping services, and the like. Repayment could be made by the return of articles unused, replacement of goods consumed during the war, or other benefits, such as cash payments or political concessions. These provisions were general enough to circumvent the nesessity of a final money settlement on a strict creditor-debtor basis. They left the door open for writing off the entire allied obligation by a thinly disguised settlement agreement.

The Settlement of Lend-Lease Accounts.—The pattern for final settlement was set in a postwar loan agreement with Great Britain in December, 1945. The primary purpose of this agreement was the extension of a loan of $3,750,000,000 to Great Britain to assist that nation in the conversion of her economy from the drastic dislocations of the war to the requirements of peace But the agreement also included provision for the cancellation of the 25 billion dollar British lend-lease obligation. Great Britain agreed to pay $650,000,000 for surplus war property and lend-lease deliveries made by the United States after V-J Day, but that sum was merely added to the new credit granted, raising the gross total of the new loan to $4,400,000,000. Thus Great Britain was freed of her lend-lease commitments. How well we have learned our lesson in international economics is demonstrated by the provisions for repayment of the new loan. It was agreed that repayment be spread over a period of fifty years, starting December 31, 1951; but if in any year Great Britain experiences serious difficulties in maintaining the international balance of payments, interest can be waived for that year. Once more a door was left open for a quiet process of future cancellations, should that policy be deemed to the best national interests of the signatory parties

In December, 1946, President Truman announced, in *The Twenty-Third Lend-Lease Report,* that settlement agreements had been completed covering over 70 per cent of all lend-lease shipments. These agreements provide for cash payments of over one billion dollars to be spread over a period of years, covering the cost of material still in process or under contract, and the cancellation of all remaining commitments after crediting reverse lend-lease aid and cash payments made for supplies delivered since V-J Day. The President justified this generous treatment by the authority of Article VII of the lend lease law, which provided that at settlement the "terms and conditions thereof shall be such as not to burden commerce between two countries, but to provide for mutually advantageous economic relations between them and the betterment of world-wide economic relations"

The foresight used in formulating the Lend Lease Act, and the many subsidiary agreements under its authorization, appear to have prevented a recurrence of the bitter war debt controversy that was the aftermath of the

previous war. The stage is clear for an intelligent policy of postwar international economic rehabilitation.

Reparations After the Second World War.—It is not entirely clear what final arrangements will be made concerning reparations to be exacted from the defeated Axis nations. This is due partly to disagreements between the U.S.S.R. and the other Allied powers. However, the influence of the United States has been thrown against repeating the mistakes of the First World War. Our government has supported a policy of moderate reparations to be levied against the defeated countries, so that the amounts to be collected will be well within their capacity to pay, and it has renounced any claims for itself. Also there is a disposition on the part of all concerned for the reparations to be paid in goods rather than in money, so as to avoid the difficult transfer problem. The Soviet Union has gone so far as to hold millions of German prisoners of war at forced labor, reconstructing devastated areas, and to dismantle and ship to Russia much German manufacturing equipment. These are regarded as equivalent to reparation payments. Likewise, Japan has been forced to give up much industrial equipment to China, to help the latter country recover from war damage. In addition to these things, the vanquished nations are also being obligated to ship certain goods on reparations account. Although these methods of handling reparations will forestall some of the difficulties formerly experienced, there is a danger that they may be carried to the point where they will impoverish the Axis nations. This will not contribute to world peace which, if it is to be permanent, must be built on a foundation of mutual prosperity.

The International Bank For Reconstruction and Development.—In the last chapter it was explained that, after the Second World War, two new international economic institutions were created for the promotion of monetary stability and world trade and reconstruction. These are the International Monetary Fund and the International Bank for Reconstruction and Development. Both organizations are designed to build a healthy postwar world economy. The fundamental objectives of the Fund are to prevent the growth of new restrictive nationalistic trade controls, encourage the reduction of existing trade barriers, and promote exchange rate stability, in an orderly, coöperative manner. The Bank is intended to extend this coöperation into the area of international long-term credit operations. Short-term lending can be supplied by the Fund, in supporting stability of exchange rates, but the more basic problems, relating to the rehabilitation of war dislocated economies, have been assigned to the Bank. The primary function of the Bank, therefore, is to provide funds urgently needed to rebuild the productive power of the borrowing countries. It is not intended that the Bank shall take the place of private investment; rather it is expected to encourage, support, and supplement the private investment market by providing capital for borrowers who would otherwise be unable to obtain the needed assistance

under reasonable borrowing stipulations. This is to be accomplished by two different types of operations: the granting of direct loans out of the resources of the Bank or from funds borrowed in the open market, and the guaranteeing of interest and principal on loans made by private investors. It is hoped that the guarantee method will be the usual form of Bank operation.

The authorized capital of the new institution at the start was set at ten billion dollars, to be contributed by the member nations in approximately the same quotas as those agreed upon for the International Monetary Fund. Twenty per cent of this capital was collected at the start and the remaining eighty per cent is subject to future calls. Since the direct loans of the Bank are limited to twenty per cent of the Bank's resources, it is expected that the other eighty per cent will be subject to call only in the event that defaults of guaranteed loans necessitate raising additional funds. The Bank is expected to examine each loan with care and guard against wasteful use of its resources. Loans and guarantees are to be restricted to specific projects of reconstruction and economic development, after careful study of both the degree of need and the capacity to repay when the maturity date arrives. Borrowers are to understand that the loans are to be repaid. Since the risk is shared by all the member countries, there is every incentive to operate the Bank efficiently.

The potential power of the Bank for constructive aid and leadership in restoring world productivity is a great challenge to the officials and the member countries of the new venture in international cooperation. Every thoughtful citizen should give his sincere support. The reduction of world trade that preceded the Second World War must be checked and the trend reversed. The sensible method of attacking the problems is to remove the pressure upon individual countries striving to protect and rebuild their internal economies. The Fund and the Bank supply the nations of the world with the tools necessary for the task ahead.

The Role of the United States.—Why do intergovernment loans, or guarantee of loans, ever take place, in the absence of the profit motive which gives rise to private investment? The reasons are both political and economic. Political motives are all too well understood. A loan can strengthen the military position of an ally to combat a common enemy. A nation may seek to purchase political power in the questionable field of world politics. War, or the threat of war, will bring these motives to the surface.

The economic motives for loans by one government to another center in the desire for larger foreign markets, high levels of national income, and full employment. These motives were much in evidence in the United States at the close of the Second World War. Our short-run national interest appeared to require buyers for an exportable surplus of goods if the transition to peace was to be made without a serious reduction in employment. Those taking a longer view were desirous of promoting a healthy world economy

as a basis for establishing international peace and national security. The national interests of prospective borrowing countries coincided with the American situation. These countries were in urgent need of equipment, materials, and foodstuffs, and it was inevitable that they would come to American markets for the major portion of these. The United States met the challenge with an extensive lending program. The total of loans authorized in 1946 exceeded 15 billion dollars. This included commitments to the International Monetary Fund and the World Bank of almost 7 billion dollars, unused credits of the Export-Import Bank exceeding 3.5 billion dollars, the loan of 4.4 billion dollars to Great Britain, and other miscellaneous projected special credits to a number of countries. Even with a complete cancellation of lend-lease accounts, the United States has embarked upon a program that will again establish it as the major creditor nation of the world. There is grave danger that all the troublesome issues of American past experience as a creditor nation may once more plague us. It is, therefore, important for our national interests that the new international financial structure function efficiently and successfully. Active leadership and responsibility on the part of the United States cannot be avoided.

Many pitfalls are ahead. Not the least of these is the problem of establishing a working arrangement between the relatively free economies and the controlled economies of U.S.S.R. and the smaller nations within her orbit of special interest. International cooperation holds out the only hope for avoiding a world of disastrous competitive nationalistic economies. The self-interest of Great Britain is equally involved. Great Britain lives by foreign trade, importing materials and food, and exporting chiefly manufactured products. This trade was demolished when the British Isles became a supply and training base for the Allied military forces. Lend-lease and the contributions of the empire maintained the British economy during the long war years. Now the rebuilding of British production and a normal flow of exports and imports depends upon the securing of American products financed directly or indirectly with American credit. Perhaps mutual self-interest may furnish the needed incentive for an intelligent policy for the solution of international economic problems.

C. Economic Imperialism

The Economic Background of Imperialism.—As a result of their investments abroad, the citizens of a wealthy nation may come to hold a large property stake in foreign countries. If unstable political conditions or hostile policies should develop in those countries, these holdings would be in danger. This leads the capitalists in the investing nation to bring pressure on their government to protect their foreign interests. As a result of this pressure, the government of the investing nation is likely to seek some form of politi-

cal domination over the other countries. As investing nations are usually rich and powerful, while the countries in which the investments have been made are likely to be relatively poor and weak, such domination is usually possible. From diplomatic pressure to protect foreign investments it is an easy step to more complete forms of political control, such as the establishment of protectorates and the outright annexation of territories. In this way empires are created. The causal sequence runs from economic penetration by investment, to domination, to empire building. The spreading of empires in this way is known as *economic imperialism*.

This is not to say that economic factors are the sole cause of empire building. Other forces are at work in the same direction. Military considerations may be among these. This is illustrated by British acquisition of territory along the route to India. Once India had been acquired, the danger that communication between it and Great Britain might be cut off by hostile powers led to the acquisition of Egypt and control of the Suez Canal. Each extension of territory seems to make it necessary to acquire more in order to protect the first. But economic factors may have been responsible for the initial expansion. Wars may also lead to the unanticipated acquisition of territory. We did not seek to acquire the Philippines, but they fell into our hands as a result of the Spanish-American War. There are also alleged to be moral reasons for the spread of imperialism. These are epitomized in the phrase "the white man's burden" The idea is that the people of western Europe and North America are innately superior to those of Asia and Africa, and that therefore we should take over Asiatic and African territory, and so carry our culture to them for their own good Propaganda along this line has been very effective in winning support for imperialistic policies, but it is rather more of an excuse than a justification. The treatment of native populations by their white conquerors has hardly borne out the claims of those who urge the "white man's burden" philosophy. It has been one of the blackest pages in human history. Sentimental motives have also played a part in imperialism. The glories of conquest, adventure, and war, and the prestige of owning vast colonies—these appeal to feelings of patriotism. The saying "The sun never sets on the British flag" makes many a Briton's heart swell with pride. Mussolini used similar motives effectively in persuading the Italian people to follow his lead in African expansion.

Nevertheless, the basic cause of imperialism has been the desire for economic gain. Japan sought to justify her aggressions in China prior to the Second World War as essential for her industrial survival. Hitler sought to extend the German Empire southward and eastward, partly as an outlet for population pressure, and partly to make an economically self sufficient political unit that would not be dependent for economic necessities on any other part of the world. Both Hitler and Mussolini stated their economic reasons for annexing territory very frankly, and English statesmen have also

acknowledged the dominance of economic motives in their colonial expansion. The British Colonial Secretary Joseph Chamberlain declared that his colonial policy was guided by the principle that new markets should be created and old ones effectively developed. Commerce, he said, is the greatest of all political interests.

How Imperialism Spreads.—Governments rarely decide deliberately to engage in imperialistic activity. The process is far more subtle and gradual. Business enterprisers, observing possibilities for large profit by penetrating new undeveloped areas, establish the first contacts. As time passes, the subjugation of the native rulers, in order to guarantee peace and protect the investments to be made, brings about the assumption of governmental powers by business interests. In the early days of colonial expansion, European governments went so far as to extend rights of government to private corporations; but, later, serious conflicts with natives, and with enterprisers from other nations, drew the home governments into the situation and necessitated the assumption of responsible political control.

In Africa each step led to another, until the final result was the carving out of possessions and the establishment of empires. Once a small foothold was obtained, further additions were made in order to make the first occupation effective, and also in the name of explorations and scientific expeditions. Frequently loans were made to the local rulers, and the home government stepped in later to enforce the collection of the obligation. French and British encroachments in Asia, which led to the setting up of French Indo-China and the British colony of Hong Kong, and later the Japanese acquisition of Manchuria, followed a similar pattern. Businessmen penetrated China economically, and invested much capital in that country. Then treaties were imposed on China which gave the investing countries special trade privileges and control over financial arrangements, especially the collection of customs duties. Finally, when China refused still further concessions to Japan, the latter proceeded with a full-scale military invasion.

The Results of Imperialism.—The immediate gains of imperialistic policy quite obviously go to the individuals who own the business enterprises that engage in economic activity in the outlying sections of the empire. Trade is carried on, in all but rare cases, by private individuals rather than by governments. To justify his position, the imperialist must prove that the gain not only accrues to business enterprisers as individuals, but also that in the end the well-being of the nation as a whole is increased. To justify governmental action involving heavy drains on the public treasury, heavy loss of lives, the defending of possessions, the risk of war with other nations, and the ruthless suppression of native rights, an increase in social welfare must be clearly proved.

Unfortunately, when it is judged by this standard, the policy of imperialism has unquestionably been a failure. The primary defense, that of building

up trade, has proven chiefly an illusion. The volume of foreign trade with the outlying possessions has fallen far below anticipations. Writing in 1926, Professor Parker T. Moon stated that, "The vast French colonial empire absorbs only 13 per cent of the exports of France, and the outlying territories, dependencies, and protégés of the United States take only one-ninth of the exports of the United States. Belgium alone, or Great Britain alone, is a larger consumer of French goods, and therefore more important as a market for France, than the whole French colonial empire. . . . Holland sells (1924) about eight times as much to Germany as to the Dutch East Indies. Belgium in 1923 sold three times as much to Argentina, ten times as much to Holland, and almost twenty times as much to France as to the Belgian colony from which so much new foreign trade was expected. Japan in 1924-25 sold 15 per cent of her exports to Korea and Formosa; but the good will of her chief customer, the United States, is three times as valuable to her as the possession of these colonies. For the other empires, colonial trade is of still less relative importance. Germany before the First World War sold to her colonies about half of one per cent of her exports."[6] The great flow of raw materials and foodstuffs and the creation of great markets promised by statesmen with imperialistic leanings have failed to materialize.

For the most part, the actual results achieved have been on the liability side of the ledger,—the necessity of assuming heavy financial burdens and the development of international hostility and unrest. One of the most serious of all results has been the constant danger of war. If only one nation had imperialistic ambitions, there would be little to fear in this direction, but the existence of several nations seeking to accomplish the same end must inevitably lead to strife.

Marxian socialists hold to the theory that imperialistic warfare is an inevitable result of the capitalistic organization of society. Capitalism, they say, is characterized by such extreme inequalities that large surpluses, far above their needs for consumption, come into the possession of the rich. As they invest these in industrial enterprises at home, their own country eventually becomes developed to the point where investment opportunities are harder to find and prospective earnings decline. Then the wealthy capitalists seek more profitable investments in undeveloped parts of the world. This leads to political domination of weaker nations in the manner explained above. But the opportunities in undeveloped parts of the world are also limited, and as different capitalistic nations seek to exploit them simultaneously, they come into conflict with each other. Warfare follows. While some details of this theory are open to question, there is an element of truth in it that should not be overlooked. At any rate, it can scarcely be denied that the economic penetration of weak countries by those which are rich and strong

[6] Parker T Moon, *Imperialism and World Politics* (1926), p 531

has been one of the factors leading to warfare in both the nineteenth and twentieth centuries.

The Remedy.—The struggle for markets, for sources of raw materials, and for emigration outlets vainly expected to relieve population pressure, appears to grow in intensity as the world's economy becomes more complex. The only remedy for the dangers of the resulting imperialism appears to be in some form of international organization. Granting independence to former colonies (as the United States has done in the Philippines and as the British are doing in Egypt and India) is not in itself enough because it merely leaves the liberated countries open to aggression on the part of other nations. Only effective international control will remove the risk that the conflict of economic interests among nations will lead to a third world war. The failure of the League of Nations was a tragedy for mankind. It is to be hoped that the United Nations will be more successful.

A promising aspect of this new organization is its Economic and Social Council (UNESCO), the purpose of which is to promote cooperation among the nations in economic and social matters. If it can bring about greater freedom of international trade, equal access to mineral resources, and rising standards of living among the poorer countries (all of which are among its announced objectives), many of the causes of international friction will disappear. It is as much through cooperation along these lines as in the development of peace enforcing machinery, that the pattern of world peace must be worked out.

Meanwhile, we must be careful to avoid imperialistic policies on the part of our own country. As to the business ventures of American citizens in foreign lands, our government should make it clear that the investor takes his own risks. The businessman knows, or should know, the risk he runs in operating an enterprise or making an investment in a small, backward nation. In fact, it is the existence of great risk that in a large degree explains the high yield that rewards success. To expect the American people to supply military force and run the risk of disastrous warfare to protect an insignificant volume of trade with backward areas, is to make those who do not share in the profits protect those who do. The businessman must be prepared to obey the laws of the country to which he goes, even if he does not himself approve of them. He does not have to invest in foreign lands. Only his desire for personal profit urges him on, and he therefore should take his own risks.

Summary

Short- and long-term international investments appear as invisible items in a nation's balance of international payments, giving rise to movements of goods in the opposite direction. An immature debtor nation, receiving a net inflow of investments from abroad, has a surplus of commodity im-

ports; a mature debtor, with a net outflow of payments for debt service charges, has an export surplus; an immature creditor, with a net outflow of new investments abroad, has an export surplus; and a mature creditor, receiving a net inflow of payments from past investments, has a surplus of commodity imports. The response of goods movements to these financial transactions takes place through the mechanism of exchange rate changes and, if gold standards prevail, through gold movements and their effects on price levels; but sometimes the connection may be more direct, and it may be interfered with or obscured by temporary or sporadic financial operations United States loans to European debtors during and following the two world wars have put this country in a creditor position with respect to long term investment, but this has been largely offset by short-term obligations

The problem of transferring large payments from one country to another is difficult because the paying country must build up an excess of exports and the receiving country must accept an excess of imports. These necessities made it impossible to collect the debts due our government by European governments after the First World War, and these governments are still in default. For similar reasons it proved impossible for the victorious Allies to collect the reparations levied against Germany. In the Second World War we avoided this problem by a program of lend lease which permitted us to advance supplies to our allies on flexible terms, the sums due being partly offset by services performed for our armed forces and in other ways by the debtors during the war, partly settled by cash payments of moderate amounts to be spread over many years in the postwar period, and partly cancelled Reparations after this war are still unsettled, but will apparently be paid in commodities and services rather than fixed in terms of money International investment in the postwar period will be facilitated by the *World Bank for Reconstruction and Development (to which funds have* been subscribed by the cooperating nations) to guarantee private loans for purposes of economic reconstruction, and to make advances to borrowing countries that might not be able to obtain credit from private lenders The United States is helping reconstruction with vast loans that will again establish it as a major creditor nation.

Foreign investment in backward countries by the capitalists of strong and wealthy nations tends to bring about economic imperialism, as the strong nations encroach on the sovereignty of the weaker nations in order to protect these investments. Noneconomic influences reinforce this encroachment Expansion of this sort brings major powers into conflict with each other and is a cause of wars. The economic gains from such expansion seldom, if ever, equal the costs. The remedy is to effect a world organization that will protect the independence of weaker nations, while providing equal access to sources of important raw materials. Investors in foreign lands should be forced to proceed at their own risk.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

An excellent work, which was helpful in developing Part A of this chapter is Theodore H Boggs *The International Trade Balance in Theory and Practice* (1922) Michael H Heilperin, in his well written little volume, *The Trade of Nations* (1947), presents not only a superior theoretical analysis of international trade and foreign investments, but also the best analysis of postwar policies and problems we have seen Part B of this chapter owes much to his work See also Norman S Buchanan, *International Investments and Domestic Welfare* (1945), for a very penetrating study More philosophic on the broader issues are two stimulating little books J B Condliffe and A Stevenson, *The Common Interest in International Organization* (1944), and Herbert Feis, *The Changing Pattern of Economic Affairs* (1940) Calvin B Hoover's *International Trade and Domestic Employment* (1945), listed at the end of the preceding chapter, was equally valuable in writing the present one, especially Part B

A convincing argument in justification of central bank policies that strive to prevent the working out of the mechanism of trade adjustment to capital movements is that of Lauchlin Currie, "Domestic Stability and International Capital Movements," published in the volume, *Explorations in Economics* (1936), pp 46 56 One of the best treatments of capital movements is Carl Iversen's *Aspects of the Theory of International Capital Movements* (1935) See also Jacob Viner, *Studies in the Theory of International Trade* (1937)

H G Moulton's and Leo Pasvolsky's *War Debts and World Prosperity* (1933) is an exhaustive, scholarly treatment which we have used freely in the discussion of these problems Acknowledgment is hereby gratefully made A shorter, but equally useful analysis of the events up to 1931, is Alvin H Hansen's *Economic Stabilization in an Unbalanced World* (1932), Part I For a very brief study, containing an excellent analysis of the arguments for and against cancellation of the war debts after the First World War, see C R Whittlesey, "Reparations, War Debts, and Foreign Investments," an essay published as Chapter IV of *Facing the Facts* (1932)

Herbert F Fraser, in his *Foreign Trade and World Politics* (1926), gives an admirable analysis of the questions of economic imperialism Liberal use has been made of this work in writing Part C of this chapter A very stimulating book on the same subject is that of Leonard Woolf, *Economic Imperialism* (1920) Parker T Moon, in his *Imperialism and World Politics* (1926), also gives a splendid analysis of imperialism Moritz J Bonn's article "Imperialism," published in the *Encyclopedia of the Social Sciences* (1932), is worth reading Lionel Robbins has written a very penetrating analysis of the relation of the modern trend towards centralized economic control and international relations in his *Economic Planning and International Order* (1937) For current information, the publications of the Foreign Policy Association furnish an excellent, readable source

PART VI

IMPROVING THE GUIDING MECHANISM OF PRICES

CHAPTER XVIII

Consumers' Demand as a Guide to Production

A. The Function of Consumption and the Obstacles to Its Fulfillment

The Guidance of Production by Consumers.—In our economic system, consumers play an important part in controlling the direction which production shall take. They do this by the choices they make in spending their incomes. For the most part, no one dictates to the consumer what he shall buy. Within the limits set by his income, his knowledge, and what can be produced, he may purchase what he prefers. In choosing to spend this way or that, he adds to the demand for the commodities of his choice. This demand registers itself in the markets where goods are bought and sold, taking the form of price offers. Since prices are determined by the demand and supply of commodities, the things which consumers demand the most bring the highest prices in relation to the means of production needed to produce them. These high prices attract production toward the goods so demanded, instead of toward goods for which the demand is weaker. In this way production is guided by consumption. Presently we shall see that the producer may influence the consumer to some extent by means of advertising and clever salesmanship, but this does not destroy the fundamental truth of the proposition just stated

If consumers were all-wise, knowing what is best for them, knowing the real utility of all the commodities offered in the markets, and possessed of the strength of will to resist the allurements of overindulgence, gaudy claptrap, and undesirable merchandise, this guidance of production by consumers' choices would be in harmony with the principle of economy, developed in Chapter I, which states that we should produce only the most beneficial goods.[1] Unfortunately, this condition of human perfection has not yet been

[1] That is, so far as each individual is concerned his income would be spent in the most economical way But the fact that consumers have unequal incomes would stand in the way of perfect economy from the social point of view The rich cause producers to attend to some of their trifling wants while ignoring the more important needs of the poor For example, the demand of the rich for silken portieres to decorate their homes may cause much labor and capital to be devoted to their production while the poor, lacking sufficient means to influence the market, may be denied sufficient clothing to protect them in winter From the social point of view this is a waste of productive resources This however, is not a defect of consumption as such it is a defect of the distribution of income Further discussion of it, therefore, will be deferred to a later point in this volume See Chapters XXI XXIII

attained. To the extent that consumers fail to live up to it, there is opportunity for waste in consumption. If we spend unwisely, buying foolish or deleterious commodities, we cause the wrong goods to be produced, and thereby cause valuable productive power to go for naught. Consumption thus stands at the head of our whole economic system, guiding and controlling it for good or for ill. In so far as consumption is misdirected, the whole productive process is distorted and led astray. This makes it important to consider what are some of the obstacles to correct standards of consumption and what measures are possible for their removal.

The Ignorance and Folly of Consumers.—The average person, even in so enlightened a nation as the United States, is still far from having the wisdom necessary to utilize his income in the manner most conducive to his welfare. Intelligence tests, formulated by psychologists and applied to large sections of our population, particularly to the soldiers drafted for our army during two world wars, show that the level of native mental ability among a large percentage of our people is still surprisingly low. In spite of the system of universal education which prevails in this country, most of our pupils never go through high school, much less through college or a university, so that they do not even develop to the fullest what intellectual capacities they have. Oftentimes, also, people who know what is good for them do not choose to act upon that knowledge. It seems so much easier to disregard the laws of health or the laws of morality. The result of this ignorance and weakness is a great deal of unwise consumption. People spend their incomes frivolously, carelessly, injuriously. Social workers tell us that, in the homes of the poor, housewives are very inefficient in their direction of the family budget, purchasing foods of little nutritive value in proportion to the money they spend. In the homes of the rich, particularly of the newly rich, there is similar waste in expenditures for flimsy show and the buying of articles of bad taste in place of those of lasting value and beauty. Then there is dissipation in its various forms—the purchase of intoxicants and narcotics, the patronizing of gambling dens and houses of ill-fame, and so on. All these things are sources of waste in consumption.

Lack of Standardization of Consumers' Goods.—One reason why the consumer does not always spend as wisely as he might is because he has no adequate means of knowing the quality and utility of the commodities which are offered to him in the market. There is a woeful lack of standards by which consumers' goods can be judged. Suppose one is desirous of purchasing a pair of shoes. He sees in the shop windows of different stores a number of pairs at different prices. How is he to tell what is the best value for his money? Two pairs of shoes may look alike. One may be all leather, well made and of sound construction throughout, the other poorly sewed and containing a great deal of paper, yet superficially so cleverly finished that the defects are not visible. No one but an expert could tell the differ-

ence. A consumer goes to the market to buy some tomatoes. How is he to tell how much he is getting for his money when different sized containers are used; when, of two baskets apparently of half-bushel size, one is so constricted in the middle as to reduce its capacity by as much as ten or even twenty per cent without the shortage being noticeable to the eye? He goes to the clothier's to buy a suit. How is he to know whether it is all wool, as the salesman assures him it is, or whether it contains a considerable portion of cotton, as is very often the case? There are many methods of adulteration, short weight, faking, and other forms of deception, by which producers can take advantage of consumers.

It is impossible for the consumer to have the detailed expert knowledge necessary to appraise properly the great variety of things which he must buy; nor has he the equipment or facilities to make the tests required. In this respect the consumer-buyer is at a decided handicap as compared with the businessman buying materials for use in his own manufacturing process. If a miller wants to buy wheat, the market organization has been so perfected that wheat is standardized into various grades, and he may order number one wheat without ever seeing it, and yet knowing exactly the quality of the grain that will be delivered to him. Even where such standardization has not been worked out, the businessman is at least sufficiently expert in his own field to judge of the quality of what he gets, and he is seldom deceived. But the ultimate consumer is not in a position to make such judgments and, in the absence of any public authority or consumers' organization to set up adequate standards of merchandise and of measurement, he is often the victim of unscrupulous dealers or of his own ignorance. These obstacles prevent the consumer from exercising effectively the role of guiding production into the channels that contribute most to his needs.

The Irrational Character of Standards of Living.—Consumption is not altogether an individual matter. Most of the things which we buy are prescribed for us by the group customs and practices under which we have been brought up. We have acquired through our family life, our friends, our education, and our contacts with people generally, certain notions as to how it is appropriate and fitting to live. We come to adopt certain standards of living as a matter of habit, without particular thought or the exercise of personal judgment. These standards of living are socially established and imposed upon us. Although there is much room for individual discretion in the details of consumption, its general outlines are established by the social environment with which we are surrounded. The kind of clothing we wear, the food we eat and the way it is cooked, the type of homes we live in and their furnishings, our forms of recreation, are all accepted by us unthinkingly from the established customs of our society. There is no reason to believe that these standards of living are based upon any rational consideration of our real needs. In fact they are often quite the reverse. The style of

women's dress, for instance, may prescribe a slender and willowy figure which results in garments that deform the body and impair the health of present as well as future generations. The standards prevailing in one's social circle may prescribe that he take his recreation in late night parties depriving him of proper rest and sleep. Yet he accepts this standard because it is in vogue among the people with whom he associates. It is the fashion in America to live in homes heated in winter several degrees above the level which physicians tell us is best for our health These examples are typical of thousands of current practices which affect our consumption and make for waste in it.

Some writers have advanced the optimistic doctrine that standards of living are subject to a process of natural selection which makes the good qualities survive and the bad ones perish, just as the fittest are given the victory over the weakest forms of animal life in nature's bitter struggle for existence. The American economist Patten declared that "Each nation has a strong tendency to love what its environment can furnish with the least expense."[2] The late John A. Hobson, an English writer, believed there was such a process of natural selection, which would make for the survival of those standards which contribute to the progress of society.[3] No doubt some features of our consuming habits have been adopted because of their importance for social health. Many of the things we habitually eat have certainly been selected because of their proven nutritive value and cheapness, such as potatoes. The recent tendency in women's dress towards shorter skirts and looser clothing is perhaps based on their greater convenience and healthfulness. But it is too sanguine a view to believe that standards of consumption are generally subject to a process of selection so rigorous that the unfit ones tend naturally to die out while the socially more desirable ones endure. The truth is that some socially undesirable standards may persist for hundreds of years.

Pecuniary Emulation and Conspicuous Consumption.—The folly and waste of many of our consuming habits were especially well exposed by the penetrating analysis of the brilliant American economist, Thorstein Veblen.[4] It was Veblen's contention that many existing standards are the outgrowth of efforts by the rich to demonstrate their superior power and prestige by elaborate ways of living. Things come to be consumed, not because of any capacity which they have to contribute to human welfare, but simply as a means of exhibiting the great opulence of their possessors. The rich disport themselves in silken garments, jewels, and limousines. They maintain their exclusive colonies, such as those at Newport and Palm Beach, where they idle away weeks of time in conspicuous leisure. This desire to

[2] S N Patten, *The Consumption of Wealth* (1889), p 36.
[3] J A Hobson, *Work and Wealth* (1914), p 10
[4] *The Theory of the Leisure Class* (1899)

acquire distinction in the eyes of one's fellow men permeates our standards of dress, our recreation, our art, and even our religious observances. It is well known that imitation is a potent force influencing social life. It is but natural, therefore, that imitation of the rich should influence the standards of consumption of the poor and moderately well-to-do. So the spirit of conspicuous display permeates the consuming habits of all classes. Even the working girl must have her imitation jewels, her nylon hose, her fur coat, often at the sacrifice of other things which would contribute far more to her comfort and well-being Although Veblen may have exaggerated this influence in modern society, the general truth of his observation is hardly to be denied.

Producers' Control of Consumption Through Advertising and Salesmanship.—The consumer is said to be free to choose what goods he shall purchase. It is true that there is very little external authority or compulsion to dictate his expenditures, but no human being is a law unto himself, directing his behavior entirely irrespective of outside forces. The strong influence of social standards has already been emphasized. The consumer is also influenced strongly by the producers whose goods he is to purchase. The suggestible nature of most individuals, coupled with the marvelous development of advertising in recent years, makes the producers' control of consumption a potent factor in our economic life. Here again there is opportunity for the misdirection of industrial activity. Mr. Stuart Chase[5] has estimated that there is over a billion dollars spent in advertising in this country every year, involving directly or indirectly the labor of some 600,000 men and a huge investment of savings. This advertising has for its purpose the control of consumption by producers, and it is so cleverly planned and carried out that it has an immense appealing power. Day after day we are bombarded from newspapers, magazines, street cars, letters, and billboards with suggestions to buy this or that. The combined influence which these suggestions make upon us, consciously or unconsciously, is enormous. The principal motive of businessmen is to make profits. We rely upon the free choice of the consumer to make it profitable for the businessman to produce only those things which the consumer really desires; but if the producer can himself control the consumer, the consumer may be made to buy what really does not contribute to his welfare at all.

This does not mean that all advertising is undesirable. Much of it has undoubted value to the consumer. It brings him into contact with means of satisfying his wants of which he might otherwise remain in ignorance. It educates him to the use of new products and devices which improve his manner of living, and it stimulates him to work harder in order to earn the means wherewith to buy the goods he sees advertised. There are other advantages which might be enumerated. Unfortunately, there is also much

[5] *The Tragedy of Waste* (1925), p 109

waste in advertising. Through advertising, a market is created for many products which possess little utility or may even be injurious. Think of the vast quantities of patent medicines, most of which are quack nostrums or worse, that are foisted upon the American public every year through appeals to fear and superstition. Advertising plays up to the weaknesses of human nature, and encourages those habits of conspicuous consumption which have just been described. The clothing trade encourages people to wear more expensive and elaborate forms of clothing. The dairy industry encourages them to eat more dairy products. The automobile industry stimulates a desire for motor cars. The tobacco industry is engaged in a vigorous campaign to increase the use of tobacco among both men and women. The development of the oil industry has provided an opportunity for promoters of fraudulent stocks to mulct millions of dollars from gullible American investors. Whether or not the benefits of advertising outweigh its disadvantages we need not try to decide. Mr. Chase estimates that, in a properly organized society, only about ten per cent of our present advertising activities would be needed, but whether this is a fair estimate or not, the important fact cannot be denied that advertising is the source of much misdirected and wasteful consumption.

Salesmanship is simply a more personal form of advertising. The salesman, by his direct contact with a prospective customer, can accomplish in a more effective way, but by very much the same methods and to much the same purpose, the results that are aimed at in advertising. Salesmanship contains in it, therefore, the same elements of utility and of waste which are characteristic of advertising.

Waste in Consumption, or Illth.—In the preceding paragraphs a number of opportunities for uneconomical expenditure by consumers have been outlined. Production will follow consumption, whether it be for good or for ill. Consequently every unwise choice on the part of consumers brings about the production of some useless or even injurious commodity. To these worthless commodities John Ruskin gave the term *illth,* to distinguish them from *wealth,* which he regarded as an ethical term, properly applicable only to goods which contribute to well-being. As a result of the ignorance, folly, and irrationality of consumers, and of the influence of advertising, the amount of such illth annually produced in this country must be very large.

Chase has suggested various forms which it may take.[6] These are, briefly: The military establishment, a large part of which he regards as aggressive and destructive, rather than defensive; deleterious drugs, opium, alcohol, tobacco, and worthless patent medicines; commercialized vice, which maintains thousands of people in brothels to pander to the illicit passions of men; quack doctors and healers of all sorts, stock swindlers, etc.; gambling houses, bucket shops, and uneconomic (as distinguished from useful) speculation;

[6] *Op. cit.,* Chapters V and VI.

the conspicuous consumption of luxuries by millionaires (and people of more moderate incomes as well); loss of goods by artificially stimulated fads and changes of fashion; commercialized recreation, such as prize-fighting, and much of our professional athletics; certain "overhead trades and professions" like the law, government, and insurance, all of which make genuine contributions to welfare, but which are overdeveloped to take care of legal technicalities, industrial risks, and public graft, which could be very much reduced in a more effectively organized society. Chase estimates that the labor power of more than ten million persons is annually wasted in producing these various forms of illth. This figure is little better than a guess, and it may be exaggerated; but if we were to cut it in half, it would still represent a waste of labor power that would be appalling.

Consumption and Productive Efficiency.—In one sense the end and goal of all productive activity is to provide consumers with goods; and consumers' choices direct and control the whole process. But in another sense, consumption is but a means to further production. Wholesome work is just as much a part of the purpose of man's existence as any of the other things he does. Now a man's productive efficiency depends upon the way he lives—that is, upon the kind of things that he consumes. This affords one test by which we can judge of the efficacy of consuming habits. Some ways of living tend to enervate the individual, impairing his capacity for further economic effort. Among the very rich excessive luxury and indulgence soften both the mind and body. Among the poor insufficient nourishment and unsanitary methods of living, coupled often with dissolute habits, break down the morale and health of the worker. The middle classes also have their vices and bad habits which interfere with their productive efficiency. From the viewpoint of national prosperity, all forms of consumption which hinder vitality and ambition prevent men from making the greatest contribution to production of which they are capable. This dovetails with the weaknesses of our standards of consumption outlined in the earlier paragraphs of this chapter. Most of the forms of consumption which were characterized as illth have this deleterious effect upon consumers' efficiency as producers. Wise national policy should seek to reduce these forms of consumption to a minimum.

B. The Improvement of Consumption

Collective Provision of Goods.—There are some commodities which are so essential to the public welfare that the state has undertaken to produce them collectively, instead of allowing each individual to provide for his own needs as best he can. Thus, public schools, free health clinics, hospital wards, garbage collection and disposal, police and fire protection, highways, and many other goods and services are supplied by the state, and paid for

out of general taxes. The cost of many of these services, as for example the construction of highways and the provision of police and fire protection, would be prohibitive if individual users had to supply their own needs. In other cases, individuals are so lacking in appreciation of their own interests that they would not pay voluntarily for many essential services. Some of these services, moreover, are of so diffused a character that it would not be possible for people to purchase them individually, even if they were willing to do so. The army and navy, which protect us all, are an illustration It is therefore necessary that in these cases individual decisions be superseded by those of the state, which determines not only the kinds and quantities of these goods that society is to consume collectively, but sometimes, as in the case of public schools, even goes so far as to compel their use.

While the value to society of such collectively provided goods is generally recognized, there is some question as to how far this kind of provision should be extended. Should the state go so far as to provide a basic ration of food and clothing to each of its citizens? There are a number of reasons why it might prove undesirable to extend too widely the collective provision of goods. One of the prime reasons is that it would tend to obscure the need for a more equitable division of income as a means of eliminating poverty Many of the goods which the state offers gratis today are designed to offset the poverty of our low income groups As the state directs its efforts toward securing a diffusion of income which will enable everyone to provide for his own basic needs, it will become less necessary to distribute goods collectively without charge, except where it is impossible to attach a price to a good or service because the cost of providing it, and the benefit derived therefrom, cannot be allocated to any specific user, as in the case of police and fire protection. A further reason against supplying the public at large with too many free goods is that many people would lack the incentive to work if all their needs were provided for. In addition, too much collective control of consumption would impinge on individual liberty, which it seems desirable to preserve, even though it may involve some loss of efficiency Particularly as people progress upward from the poverty level is the price system likely to prove a superior method of guiding production, provided that the imperfections in consumer choices described above, which result from lack of knowledge about the commodities purchased and the unequal division of income, can be overcome. Finally, the task of providing for the wide variety of goods and services which individual preferences require is almost too complex to be dictated by legislative or administrative decision It can probably be accomplished more efficiently through the functioning of the price mechanism.

Sumptuary Legislation.—To a certain extent, economy and efficiency in consumption can be promoted by sumptuary legislation Sumptuary legislation is legislation aimed directly at the control of consumption Some peo

ple think it would be ideal for the standards of living of the people and their consuming habits to be directed by governmental authority This is the view of the communists, of whom we shall have more to say in a later chapter In the United States, however, most people believe in individual liberty, and nowhere is this principle more tenaciously clung to, and its infringement more strenuously opposed, than in matters relating to consumption. The American citizen feels that he has a right to live as he pleases, and that no government or other authority should dictate how he should spend his income From the standpoint of national efficiency, there may be just as much justification for laws controlling consumption as for those controlling production or any other phase of economic activity, but the contrary popular attitude is one which must be recognized in formulating any feasible program.

This is well illustrated by the prohibition experiment carried on in the United States from 1918 to 1933. Although ostensibly a law to prevent the manufacture and sale of alcoholic drinks, it was, in effect, designed to prevent the consumption of such beverages. The liquor traffic results in so much economic waste and social evil that there is much to be said in favor of its elimination, but it is almost impossible to enforce so drastic a piece of legislation unless it has the hearty support of a great majority of the people. The prohibition amendment did not have such support, and its enforcement was far from effective. Its repeal, consequently, was not surprising.

Notwithstanding the difficulty of enforcing sumptuary legislation, governments in this country and abroad have succeeded in restricting or directing consuming habits in various particulars. Often there are laws prohibiting the sale of certain articles, such as opium and other habit forming drugs, and obscene literature and pictures Censorship of motion pictures and plays is of a similar character. Then there is the attempted suppression of vice, gambling houses, and the like. During the First World War the control of consumption was carried much further than ever before. This was made possible by appeal to patriotic motives, which led people to submit to petty interferences that ordinarily they would not have tolerated. But this, like most legislation of the sort, was indirect. It took the form of controlling the kinds of goods that could be made and offered for sale, thus operating on producers, rather than definitely controlling the behavior of the consumer himself Nevertheless the purpose of such legislation was to turn consumption into certain channels, and it had that effect. For instance, bakers were ordered to put certain proportions of wheat flour substitutes into their loaves, sugar was rationed out sparingly for such unessential purposes as making candy and soft drinks, and the amount of sugar which hotels and restaurants could serve to their patrons was greatly reduced. Similar measures were extended to other commodities, including fats and some perishable foodstuffs. In the Second World War, a more extensive system of direct rationing of many commodities was put into effect, but in

this case the purpose was not so much to direct consumption into certain channels as to make effective the general machinery of price control. This will be explained in Chapter XX. Following the wars, all these restrictions were removed, and freedom of choice in such matters was restored to consumers.

While sumptuary legislation thus offers possibilities for improving consumption in a few special cases and circumstances, it is probably wiser, on the whole, to rely on other measures to accomplish the desired results.

Government Protection of Consumers.—One way that the government can help the consumer is to protect him against some of the abuses by which unscrupulous producers exploit him. The Pure Food and Drugs Act of 1906 made a step in this direction by establishing standards of purity for the manufacture of certain drugs, confections, and food products, and by prohibiting their adulteration. It also forbade labels which bore any statement concerning the ingredients of these goods which was false or misleading in any particular. Appropriate penalties for violations were provided, and enforcement of the law was vested in various departments of the federal government, particularly in the Food and Drug Administration. This law was considerably strengthened by the Food, Drug, and Cosmetic Act of 1938 This act authorizes the Secretary of Agriculture (in whose department the Food and Drug Administration was then located) to promulgate standards of identity, quality, and fill for all food products, raw or processed, bulk or packaged Observance of these standards is compulsory. He is also authorized to examine and test new drugs, and, until he has certified that such drugs are safe for human use, their sale is prohibited. In addition, cosmetics are made subject to the same general standards respecting adulteration and misbranding as those applicable to foods and drugs. The strict labelling provisions of the law also require that all commodities subject to it be labelled in such manner as to reveal the principal ingredients and disclose the presence of dangerous or habit-forming constituents.

This legislation has done a great deal to protect the consumer against unprincipled businessmen who would foist worthless or even injurious products upon him, were they not restrained by law. Today, consumers can be reasonably sure that they are protected against deception, as well as possible injury or death, through the activities of the Food and Drug Administration to promote the sale of pure foods, drugs, and cosmetics, packaged under sanitary conditions, in safe and accurately labelled containers.

Another federal organization that is doing much to protect consumers against unscrupulous business practices is the Federal Trade Commission, whose work was described in part in Chapter III. The activities of this commission in helping to break up monopolies and in suppressing unfair methods of competition redound to the advantage of consumers Prior to 1938, however, the commission was intended primarily to protect ethical

business enterprises against unfair methods on the part of their less honorable competitors, and it acted to suppress such methods only on the complaint of some producer who felt he was being injured. Hence, any benefit derived by consumers was merely incidental. This situation was changed by the Wheeler-Lea Act, twin of the Food, Drug and Cosmetic Act of 1938. This law empowers the commission to act directly, on its own initiative, to suppress unfair business practices that it finds contrary to the best interests of the consumer. In particular, the act is designed to protect him against advertising which makes untrue claims about a product, or fails to inform him of the consequences that might result from its use.

The protection afforded to consumers by both the Food, Drug, and Cosmetic Act and the Wheeler-Lea Act is incomplete in that these laws apply only to commodities sold in interstate trade, or advertised across state lines. Only fifteen states have undertaken to remedy this situation by passing "little" Food, Drug, and Cosmetic acts patterned after the federal law. A further flaw in the Wheeler-Lea Act is that it makes it difficult to protect the public against misleading advertising because the Federal Trade Commission cannot penalize an advertiser unless it can prove in court that the advertised product is harmful, or that there was a deliberate attempt to defraud the public. This has proved in practice to be a hard task. Both the Federal Trade Commission and the Food and Drug Administration are further handicapped by their lack of funds. Notwithstanding the inadequacies of law and administration, both agencies are giving consumers valuable information which will help them to buy more intelligently.

Other governmental bodies to assist the consumer have been established at various times, but their accomplishments have been rather disappointing. The Bureau of Home Economics has been constantly handicapped by inadequate appropriations and is helpless to oppose the interests of producers. The Consumers' Advisory Board, set up under the National Industrial Recovery Act to represent the interests of consumers in the formulation of codes, was accorded no vote on the approval or rejection of these codes. The Agricultural Adjustment Administration also had a Consumers' Council to examine marketing agreements and publish information regarding retail food prices. For several years it secured considerable publicity concerning unreasonable prices, but since its reorganization in 1935 it has been relatively ineffective.

There is still needed some government agency directly charged with the duty of giving consumers honest and accurate information about the goods they buy. It has been suggested that there be established for this purpose a federal Department of the Consumer with a cabinet officer at its head. The consumer would thus be given protection by a permanent body created to represent him The United States government already has a Bureau of Standards to guide it in making its own purchases. It is equipped with laboratories and technicians qualified to make tests of every conceivable

kind of merchandise, and it is continually making such tests. But these are for the use of government bureaus in securing supplies; the wealth of information about qualities and products of different producers now resting in its files is not available to the general public. This is in contrast to the practice of the British government. Its National Physical Laboratory is similar to our Bureau of Standards, and its findings are open to the public. Our Bureau of Standards should do likewise. Such a policy could injure no one except those producers who make inferior goods and palm them off on unsuspecting purchasers. Such producers ought to be forced to come up to the standards of those who make better merchandise, or go out of business. Publicity of findings by the Bureau of Standards would put American consumers in a position to know what they are buying, and would go far toward ending many of the abuses described in the earlier sections of this chapter.

The Better Business Movement.—Businessmen with some conception of their duty to their customers can decrease the wastes involved in deceptive advertising and the marketing of claptrap merchandise by organized effort of their own. Of course, many of the wastes of display advertising, designed to attract consumers to this or that producer and to win him away from some competitor, must necessarily continue so long as the competitive system of industry itself survives. On the other hand, it is possible to control the deliberate misleading of the consumer by exaggerated or untruthful advertising. The Associated Advertising Clubs of the World, at their convention in Baltimore in 1913, passed a resolution endorsing truth as the cornerstone of all honorable and successful business, and at the same time organized a National Vigilance Committee which, in cooperation with Better Business Bureaus set up among the businessmen of many local communities, has been actively sponsoring a truth-in-advertising movement. The purpose of this movement, and of the affiliated business bureaus, as its name indicates, is to eliminate untruth and fraud in advertising. It has been instrumental in exposing and putting to rout considerable numbers of fake stock-promotion schemes, speculative building and loan projects, fraudulent use of well-known trade marks, and various kinds of misbranding and untruthful advertising. Among its activities has been a campaign to eliminate the practice of advertising goods as reduced in price when in fact they are not. The National Bureau concerns itself primarily with the standards of national advertising, while the local bureaus deal with unfair practices in their own communities only. This movement is clearly to be commended, but it can hardly be expected to do more than eliminate the grosser forms of lying and deceit in advertising. Since it is the purpose of advertising to be alluring to the prospective customer, it is almost inevitable that its descriptions shall be exaggerated and to some extent misleading. But if even the worst prac-

tices can be eliminated by the businessmen themselves and by public agencies, a great step forward will have been taken.

Other Organizations to Help Consumers.—In addition to the governmental bodies and Better Business Bureaus already mentioned, there are numerous private organizations which assist, directly or indirectly, in guiding consumers to wise purchases and better standards of living. Such are: the American Medical Association, which warns the public against the use of quack nostrums; the American Institute of Architects, which encourages the building of better homes and the improvement of town planning; the Anti-Saloon League and the Women's Christian Temperance Union, which fight against the evils of the saloon and overindulgence in alcoholic drinks; the National Motion Picture League, which promotes the patronage of the better types of motion pictures; and many other consumers' organizations and private philanthropies. More might be done along these lines by consumers themselves through the formation of consumers' guilds or other associations definitely aimed at eliminating the obstacles that now stand in the way of wise consumption.

In recent years, several consumer organizations have been established for the purpose of supplying their members with definite facts about the various products offered them for sale.[7] Deriving their income from annual membership fees, they secure information from laboratory tests and other sources which is sent to their members in periodic bulletins. While lacking the facilities for doing such work in as elaborate and scientific a way as the United States Bureau of Standards, they are doing some effective work toward enabling their subscribers to judge correctly the merits and defects of what they buy. Such organizations show what might be done by consumers to look after their own interests if they were organized *en masse* to do so.

Consumers Cooperation as a Means of Protecting Consumers.—In Chapter VI we learned something of the organization and work of consumers' cooperative stores, which have come to occupy an important place among the marketing institutions of some countries. These consumer cooperatives offer a medium through which consumers may be protected against the abuses that have been described above. Since the cooperatives are owned and controlled by their customers and run for the customers' benefit, they would have no reason to exploit consumers. The consumer boards of directors can specify the qualities of the goods they wish put on their shelves, and they can enforce these specifications upon the manufacturers from whom they purchase their supplies. If the members of the cooperatives are not satisfied with the goods they are getting, they have at their disposal a democratic means of registering their complaints and insisting upon better standards, through meetings which are held by them from time to time. Where the

[7] The two leading organizations of this type are Consumers' Research, Inc., Washington, New Jersey, and The Consumers Union, 17 Union Square, New York 3, New York.

coöperatives have grown to the point that they operate some of their own manufacturing establishments, they have a means of maintaining standards at the very source of their products.

Some of the more enthusiastic supporters of the consumer coöperative movement look upon it as having far greater possibilities. They believe it is destined eventually to replace the capitalistic system of industry with a coöperative economy, in which all the operations of industry will be owned and controlled by consumer coöperatives, just as some wholesale establishments and factories are now so owned and controlled. They believe this would solve most of our economic problems because they think it would replace the competitive rivalry of industry with a coöperative spirit of human brotherhood. Production for profits would be replaced by production for use. This is probably too optimistic a hope. It is not clear how the coöperatives would solve the problem of employer-employee relations, and there are many other economic problems, such as those pertaining to the monetary system, for which coöperation in itself offers no specific solution. However, if consumer coöperatives can demonstrate as high a level of efficiency as retail and wholesale marketing concerns operated under the prevailing system of private enterprise, they may in time offer a satisfactory means of providing consumers with standardized goods of high quality at reasonable prices.

Education of the Consumer.—In the last analysis, improvement in the arts of consumption is a matter of education. We must build up in the consumer a desire for right ways of living, and provide him with the knowledge whereby he can adopt such ways. Our present educational system trains him in cultural subjects and, to a certain extent, in vocational lines which will help him to secure an income, but there is little in our curricula which teaches him how to use that income wisely, once it has been acquired. He is expected to acquire from his family life and environment the knowledge necessary to live wisely. Enough has been said to show that the result is far from satisfactory. An indication of some things that can be done to correct these difficulties is to be found in the domestic science courses now spreading in our public schools, and in a few other subjects, but the possibilities have hardly been touched. Through the public schools, through educational advertising by the government itself, and through various other agencies, some examples of which have been suggested in the preceding paragraphs of this chapter, it should be possible to carry on a campaign of education designed to cultivate higher standards of living among the American people. This would go a long way toward building up those wise habits of consumption which will direct production into channels that make for real prosperity.

SUMMARY

In a regime of free enterprise, consumers' choices, acting through the price system, direct production. Much economic waste in this process results from ignorance, folly, and lack of standardization, which prevent consumers from knowing the real quality of the goods they buy. This is accentuated by irrational standards of living which are based upon the desire to display wealth rather than to live wisely. Producers' control of the consumer, through advertising and salesmanship, often leads him to buy goods which he does not need, or which are even injurious. As the result of all these influences, large quantities of goods are annually produced which are to be described as illth, rather than ethical wealth. Consumption should be so directed as to promote the productive efficiency of consumers, avoiding dissipation and unhealthful habits.

The collective provision of essential goods and services is one way in which the government can promote improved standards of consumption, although it is doubtful that it would be wise to extend its activities too far in this direction. Sumptuary legislation can also help somewhat in the achievement of such standards, but it can only suffice to prohibit the most flagrantly injurious forms of consumption. Consumers can also be protected against deception, adulteration, misbranding, and misleading advertising by such laws as the Food, Drug, and Cosmetic Act and the Wheeler-Lea Act, and by appropriate administrative agencies, such as the Food and Drugs Administration and the Federal Trade Commission. The grosser forms of fraudulent advertising are being somewhat reduced by the Better Business Movement among businessmen. Various organizations among consumers themselves are helping to guide them toward better informed use of the goods made possible by modern productive methods. These measures should be extended and supplemented by further education of the consumer through the public school system, and public dissemination of information on the arts of living. Finally, consumer coöperatives offer to consumers a means of direct control over the goods they buy, but it is too much to expect that such coöperatives can completely replace the capitalistic system of production.

SUGGESTIONS FOR FURTHER READING

Hazel Kyrk did much toward developing a coherent treatment of the neglected subject of consumption in her book, *A Theory of Consumption* (1923). A more comprehensive survey, treating the psychological, sociological, and economic aspects of the subject, is to be found in E. E. Hoyt's *The Consumption of Wealth* (1928). Charles S. Wyand's *The Economics of Consumption* (1937) is likewise a comprehensive treatment of its field, containing a great deal of pertinent factual information, but its theoretical position is not always above criticism. Margaret G. Reid's *Consumers and the Market* (1938) offers a well-developed analysis of our

marketing organization as it affects the consumer. A justly popular textbook on the subject of consumption is Leland J. Gordon's *Economics for Consumers* (second edition, 1944).

Thorstein Veblen's *The Theory of the Leisure Class* (1899) is a brilliant and justly famous exposé of the conspicuous waste involved in our pecuniary standards of consumption. John Ruskin's *Munera Pulveris* shows keenly the superficiality of many of our ideas of wealth, and has been the inspiration for a number of modern writers on the same theme. See, for instance, J. A. Hobson, *Work and Wealth* (1914); and W. A. Robson, *The Relation of Wealth to Welfare* (1925).

CHAPTER XIX

The Price System, and Monopoly Price Regulation

A. How the Price System Functions

Prices as a Guiding Mechanism.—When industry is divided into thousands of separate parts, each managed by a different group of individuals, without any central authority to direct or control it, there must be some means of keeping the whole coördinated and in balance. Otherwise the process would be wasteful and chaotic. Too much of some things would be produced, and too little of others. Plants making textiles might be kept idle because not enough yarn was being produced to provide them with raw material, while leather tanneries might be closed down because they had produced leather far in excess of shoe manufacturers' requirements. It is the function of the price system to prevent this lack of balance, or to correct it when it occurs, thereby providing the necessary guidance and coördination. It does this through the adjustment between the demand for and supply of goods which is brought about by the movements of prices in the market.

We have seen one phase of this process in the last chapter, where we learned how demand guides production in the directions indicated by consumers' choices, however good or bad these choices may be. We are now to consider some further problems that arise out of the imperfections of the price system as it functions in the contemporary world.

Particular Prices and the Price Level.—At the outset it must be made clear that we are not here concerned with the general level of prices. That is a monetary problem, with which we have already dealt (Chapter XIV). Our problem now has to do with the relations between the prices of particular goods. Each good has a price attached to it, which measures what it is worth (its value) in relation to other goods. A pound of platinum is worth thousands of dollars, while a pound of rice is worth only a few cents; butter commands a higher price than sugar; natural gas is cheaper than manufactured gas; and so on. Regardless of how the general level of prices may move, these differences in the relative worth of different commodities persist, and the prices of particular goods will move differently from the average of all prices. For instance, while the general level of prices is increasing by fifty per cent, some prices may rise as much as one hundred per cent, and others only twenty-five per cent, while some may actually decline, depending on what is happening to their relative values.

The Problem of Fair Prices.—These particular price relationships have important economic consequences, and when they change they are bound to affect this or that group in society for better or worse, as the case may be. To illustrate, if the price of a streetcar ride is increased, relatively to the price (wages) of labor, the street railway company will be benefited at the expense of wage-earners who have to use the streetcars on their way to and from their places of employment; and if the price of butter declines in relation to other prices, consumers will gain while dairy farmers will suffer. It is important, therefore, if justice is to be done, that prices be fair to all parties This raises the difficult question of what constitutes fairness in pricing We must seek an answer to this question if we would grapple with the problems of price control. We will be in a better position to answer it if we first understand how the price system works in a free market, in the absence of monopolies or other restrictive controls.

How the Competitive Price System Works.—A characteristic of modern competitive markets is the tendency known as the law of one price, with which the student is doubtless already familiar. According to this law, competition tends to compel a seller to offer his wares to all his customers on equal terms, and on the same terms as his competitors. Otherwise the business would all go to the lowest seller. Hence, at a given time, a commodity tends to sell at the same price throughout the whole of any one market Where competition is effective, this rule will be observed, but it must not be expected to work out exactly A truly competitive market is one where both buyers and sellers make their quotations openly, so that each seller knows what the others are getting This condition is seldom fully realized, hence some differences of prices are likely to exist, especially in retail markets, where competition among buyers is least keen. The differences are usually small, however, and the rule holds approximately true. It has an important bearing upon the problem of price discrimination, which is to be taken up in a later paragraph.

The price established for any commodity tends to be such as to make the demand for it equal to its supply. It is easy to see why this is so If, at the price prevailing, the effective demand exceeds the effective supply, not all the buyers can be satisfied, and competition among them to secure what they need will force the price up until the demand is checked. The rise in price will encourage sellers to produce more of the product, and so the effective supply increases until it equals the demand. On the other hand, if, at the price ruling, effective supply exceeds effective demand, producers will not be able to sell all of their stocks. They will be forced to lower prices until demand is stimulated and production checked. Equilibrium will then be restored. Thus, the competitive price system tends to maintain a nice adjustment in the production and consumption of each commodity; but this is a tendency not fully effective, as we shall see

The Economy of the Price System.—In the short run, equilibrium between the demand and supply is achieved at a price which equals the marginal costs of producing the commodity concerned. That is to say, each firm is induced to increase its production up to, but not beyond, the point where the proceeds from the sale of the extra output just cover the extra cost of producing it. This means that existing facilities are used just as far as, but no further than, their use is worthwhile, on the basis of the existing demand. Thus the result contributes to economical use of our resources.

In the long run, the price tends to settle at the optimum (rather than the marginal) costs. This tends to bring about a further economy in the use of productive resources because it drives the price down to the costs of the most efficient firms. Less efficient producers, whose costs are above the optimum, must thereupon improve their efficiency or be driven out of business. Thus, the best methods of production are promoted.

There is a deeper meaning in the competitive pricing process which is of the greatest significance for the attainment of social economy. Since our productive resources are scarce in relation to our desires, economy requires that they be used only for our most important needs. People should not be allowed to dissipate valuable resources in the satisfaction of trivial whims when more important needs are not provided for. The price system helps to achieve this principle. To begin with, it forces every consumer to pay as much for his goods as other consumers will pay. This prevents any purchaser from obtaining goods which are more valuable to someone else than they are to him. In a similar manner, the factors (agents) of production are restricted to the strongest demands, through the principle of opportunity costs. Producers, in responding to the price offers of consumers, are led to bid for the factors which they must use in manufacturing the goods necessary to satisfy the demands for their products. Thus, prices are set upon the agents of production by a competitive bidding among enterprisers, similar to the bidding among consumers for consumers' goods. These prices are the costs of production which businessmen must pay. Since they are set by competitive bidding, it follows that each producer must pay as much for his capital or his labor as any other producer is paying. Consequently, what it costs an enterpriser to use any factor of production is determined by what it is worth to other firms, not only in his own industry, but in all industries. The essence of this is summed up in the *principle of opportunity costs,* which states that *the use of any agent in production involves a cost which is determined by the prices offered for that agent in its possible alternative uses.*

The student would do well to memorize this law, because it goes to the very heart of the price system. It is, therefore, one of the most significant principles in the whole of economics. Consider, for instance, what is the inner meaning of the statement, so often heard, that the price of a commodity tends to equal its cost of production. It means that the price tends to the

point where the factors of production required to make that commodity are worth just as much as, and no more than, they would be worth if they were devoted to the production of any other good for which they are suitable. If a commodity is selling at a price above its cost, it means that the factors employed in its production are worth more than in their alternative uses This is the signal for more of that commodity to be produced, for when a price is above costs, the industry is enjoying profits above the normal returns to capital and enterprise, hence it tends to expand. By this means, factors are drawn away from those uses where the product is worth less to those where it is worth more. This goes on until the price of the first product falls to equality with costs, which means that the value of the factors in that industry is now no greater than elsewhere. When the price of a commodity is less than its costs, on the other hand, it means that the factors employed in that industry are worth less than in other industries, because too much of the product has been produced, so that consumers do not value it as highly, in proportion to the factors employed, as they do other goods for which those factors might be used. As a result, enterprisers in the industry will suffer losses, and production will be reduced until equilibrium with other industries is restored (that is, until price rises to equality with costs). So, through the operation of the law of opportunity costs, productive resources are allocated in such a way as to maximize the satisfaction of consumers' demand. It that demand were an accurate reflection of social needs, this principle of allocation would be perfect

Obstacles to Economy in the Price System.—Although it is the function of the pricing process thus to promote economy in the use of our productive resources, the full attainment of such economy is interfered with by a number of obstacles:

In the first place, the price system causes production to follow demand, and demand rests partly on the choices of consumers. Unfortunately, consumers do not always spend their incomes wisely. This difficulty was fully discussed in the last chapter, where it was shown that the weakness and ignorance of human nature, coupled with the subtle coercion and deception practiced by antisocial businessmen, prevent consumers' demands from being a perfect indicator of human need. The result is that they buy things of little or no benefit, instead of getting the things which would contribute most to their welfare. This is largely responsible for that malproduction, or creation of illth, which we have found to be one of the great wastes of our economic organization.

A second obstacle, which again prevents demand from guiding production according to needs, lies in the fact that consumers' incomes are unequal Some people have much more money to spend than others; hence they exercise more control in the market As their incomes are very large, they can spend a considerable proportion of them for relatively unimportant

things, such as diamond necklaces, racing automobiles, gold cigarette cases, and the like. Thus it is that, under the competitive pricing system, productive energies are devoted to supplying capricious luxuries for the rich while important needs of the poor go unprovided for.

It was said above that our price system tends to keep producers' costs at a minimum; but producers, like consumers, do not always act wisely. As we saw in Chapter II, many economic wastes creep into business operations because enterprisers are inefficient, failing to use the most advantageous techniques of production. The result is that costs are not as low as they might be, and maximum economy of production is not attained

A fourth obstacle to the attainment of economy by the price mechanism rests in the frictions of industry which prevent the rapid adjustment of demand and supply. If buyers and sellers were always alert and well informed, and if labor and capital were always perfectly mobile, no maladjustment between demand and supply could long endure, for prices would quickly reveal it, and as quickly correct it by the appropriate redirection of economic effort Unfortunately, the process of readjustment may be so slow that demand and supply will remain out of balance for a long time, during which the prices of the commodities concerned will not be at their normal positions. There may be overinvestment in some kind of fixed capital, such as shipyards The excess equipment will depress the prices of ships and the value of shipbuilding equipment, but this will not bring about the needed reduction in supply, for neither the ships nor the shipyards will soon wear out, and they cannot readily be converted to other uses The result will be cheaper shipping rates to users, but losses to shipbuilders and shipowners. Again, the destruction of some crop—such as cotton, by an insect pest like the boll weevil—might raise the price of the product for several seasons without bringing about the needed increase in its output An uncorrected scarcity of cotton would continue, while prices would be too high for consumers. So we see that, because of the slowness with which demand and supply come to equilibrium, prices, if left to themselves, may not distribute our resources to the greatest advantage.

This obstacle—frictions in the adjustment of the economic process to change—is being increasingly aggravated by certain tendencies toward inflexibility of prices that are growing in the contemporary world. There are some prices, especially those which prevail in actively competitive markets, that move frequently and freely in response to changing conditions of demand or supply. Most agricultural commodities fall in this category. There are other prices which remain unchanged for fairly long periods of time This is true of public utility rates, which are fixed by regulatory commissions. A change in these rates requires lengthy hearings and investigations, involving much time and expense, so that these rates are very seldom altered. There are certain other commodities, especially those produced under condi-

tions of monopoly or oligopoly, which change but slowly. The price of steel rails, for instance, remains fixed for many months; it does not change from day to day or week to week. Wage rates are likewise inflexible, especially in strongly unionized occupations. Contrast this with the prices of cotton or wheat, which change from day to day (or even from hour to hour) on the organized commodity exchanges. The presence of the inflexible prices makes for maladjustment. When some prices move freely while others are kept rigid, the impact of any change affecting the price structure falls most severely on the flexible prices and throws them sharply out of balance with the others. Farmers are especially likely to be affected in this way because the prices of their products generally move more freely than those of manufactured goods.

The presence of monopoly is apt to distort the normal relationships among prices in another way. The tendencies toward economy in the price system that were explained were posited upon the assumption that prices would be fixed in a process of competitive bidding, but monopolistic practices are now so prevalent in industry that many prices are artificially raised by restrictions on the output of certain commodities. This prevents the use, in the monopolized industries, of productive resources that could be economically employed therein, and forces the excluded resources to be directed elsewhere, where they are less valuable. The principle of opportunity costs is thus prevented from being fully operative.

Finally, the defects in our monetary system, which were described in Chapters XIV and XV, interfere with the economic functioning of the pricing process. The uneven incidence of monetary inflation and deflation distorts normal price relationships and upsets the balance of specific demands and supplies. Not until money is made neutral will this disturbing influence be removed.

Removal of the Obstacles.—The above analysis indicates that there are certain tendencies toward economy in the price system, but that various obstacles interfere with their realization. For the most part, these obstacles are not inherent in the pricing mechanism as such, but arise out of certain characteristics of the economic setting in which the price system operates. Demand would be a better guide for production, for example, if consumers could be better educated and goods better standardized, along the lines suggested in the preceding chapter. The distortion of demand by inequality of income is more difficult to grapple with, but in Part VII of this volume a program will be presented for achieving a satisfactory division of the national income within the framework of the price system. Methods for dealing with wastes in the technique of production have already been outlined (in Chapter II), and in Chapters XIV and XV reforms were suggested which would eliminate monetary distortions of price relationships. We have also considered measures for dealing with monopoly. The frictions of industry

and the problem of inflexible prices may require comprehensive measures of general economic planning before they can be dealt with satisfactorily, but in such a system of planning we would surely want to use the mechanism of prices as a guide.

From all this it appears that the price system will function well enough, provided that it has the proper environment to work in. We cannot expect prices to operate smoothly in a world of inequality, ignorance, uncontrolled exploitation, and monetary instability. However, if we can provide a more satisfactory environment for prices to work in, they can play a very useful part. In short, prices are merely the neutral mechanism through which the various aspects of our economy, both good and bad, find their expression. They are useful in an imperfect world; they will be even more useful in a more perfect one.

This does not mean that the price system should never be interfered with. Cases arise where it seems wise for the government to step in to control the prices of goods. There are other cases where it does step in when it might be wiser for it to keep out. We shall proceed to explore both of these situations.

Normal Price as a Criterion of Fairness.—*Proceeding, then, upon the assumption that the price system is to be retained as the guiding mechanism for industry, any program of price regulation would seek to promote, rather than to hamper, the maintenance of normal prices. If a price is to be regulated, instead of left to the mercy of the market, the object of the regulation should be to bring the price as nearly as possible to its long-run competitive norm, for that is the price which, under the ideal conditions we are seeking to establish, will promote the greatest economy in the use of our resources. The long-run normal price, we have learned, is equal to the average costs of production of optimum enterprises. Here, then, is a criterion for price regulation. When it is necessary to fix a price by decree, let it be such as to cover the average costs of production in well-managed establishments. What this means, in practical application, we shall discover as we proceed.

Price regulation usually arises when particular prices are believed to be unfair to consumers or producers, as the case may be. The object of the regulation is to restore the price to what is regarded as a fair figure. We shall find that in practice this generally means a price which does not deviate very far from the cost of producing the commodity concerned. From this it may be observed that people generally recognize the close relation between prices and costs which our analysis reveals to be normal. Thus, common sense is in substantial accord with the findings of economic theory. In setting up normal prices as the criterion for price regulation we are, therefore, proposing a standard which will be regarded as fair by the general public.

B. The Control of Monopoly Prices

Consumer Pressure for Price Protection.—When a particular price, or group of prices, rises much above the level to which consumers have been accustomed, the latter are very apt to rebel and press for some relief Then legislators and congressmen are deluged with demands for action, and some legislation designed to check the rising prices is likely to result. Such agitation is not always reasonable, for if real costs of production are increasing because of changes in the conditions surrounding the affected industry, a higher price is necessary for the continuance of production. To prohibit it in these circumstances would be to drive the industry out of existence. However, if the object of the price control is to prevent profiteers from taking advantage of a temporary shortage of some commodity at the expense of consumers, it may be justifiable to prevent the price from rising for the time being. Stock and commodity exchanges act wisely, for instance, when they suspend dealing in securities or commodities whose prices rise (or fall) precipitously.

Price intereference on behalf of consumers is particularly justified where commodities are controlled by monopoly. Where such monopoly cannot be kept in check by the methods advocated in Chapter III, prices can only be kept equal to costs by government intervention, The consumer is entitled to this protection. Monopolistic practices are indeed the most frequent source of price regulation in the consumers' interest. It will be instructive to examine the problem of price regulation under such circumstances.

Public Utilities Rate Regulation.—In Chapter V we learned that there is a group of industries, known as public utilities, whose monopoly position is so secure, and which control necessities so important to the people, that their prices have long been subjected to regulation by the public authorities Chief among these industries are transportation systems, telephones, telegraphs, waterworks, gasworks, and electric power plants. Since the output of these industries constitutes well over ten per cent of our national income the extension of price fixing into this field represents a substantial departure from the open market pricing process. Regulation of them has quite generally been intrusted to public utilities commissions

Public service corporations usually possess a complete monopoly of their respective products within the territory which they serve, and it is quite desirable that they should, for a community can usually be served more economically and efficiently by one system of street railways, one telephone system, or one water supply, than by two or more But the existence of monopoly frees such corporations from competitive price-making influences, so that if they were not restrained they would be in a position to exploit the public by making exorbitant charges for their services Hence, the prob-

lem which confronts the regulating authorities is essentially one of monopoly price.

It will be noted that the goods supplied by public utilities consist in many cases of services, such as the transportation of merchandise or the provision of telephone facilities, rather than of material commodities—although water and gas fall strictly within the latter category. Perhaps because of the non-material character of these products, their prices have come to be known as rates. Nevertheless, rate regulation is essentially a process of price fixing, very similar in its nature to the pricing of commodities.

The Bases of Rate Regulation.—According to the criterion we have adopted, the rates should be fixed at a figure equal to the optimum costs of producing the commodity or service concerned. The commissions and the courts, however, have generally held that rates established must cover, not the optimum costs, but the costs actually incurred in each particular case. The problem is to ascertain just what these costs are in the case of the particular company whose rates are being considered.

It is easy enough to ascertain the outlays which a company makes for raw materials, wages, repairs, maintenance, taxes, insurance, advertising, and other items which involve actual payments to other parties. It is not so easy to say what should be allowed to the company for its investment in the plant. A return to the enterprise for its investment and management is recognized in economic theory as a cost, and it is recognized in the law and practice of rate regulation that such an allowance must be made. The legal rule is that the regulating authorities must fix rates high enough to yield the company a "fair return" on the "fair value" of its property "used and useful in the public service." Since this return does not constitute an outlay fixed by market prices, the amount which should be allowed for it is a matter of judgment which presents difficult questions of equity and expedience. In current practice the return is computed, like interest, as a percentage of the value which the stockholders have invested in the plant. No separation is made between interest, wages of management, and reward for risk, but a gross rate of profit is sought which will provide adequate compensation for these elements. This involves two problems: What is a fair rate of return; and what is the value of the investment to which this rate is to be applied? The latter question involves the difficult task of valuing the property of the corporation to be regulated, a task both intricate and technical. We shall consider this first before entering into a discussion of the fair return.

Valuation of the Property.—The correct valuation of the property is of importance in rate regulation because if it is overvalued, the return, computed as a percentage of it, will be too high. It will yield excessive profits to the monopoly at the expense of consumers, who must pay higher prices for the service in order that this profit may be obtained. If the property is

undervalued, the return will not compensate the company adequately, and prices to consumers will be too low. Four possible bases for valuing the property suggest themselves, namely: (1) the par value of the company's stock, (2) the market value of that stock, (3) the original cost of the company's plant, (4) the cost of reproducing that plant at the present time.

The first method is clearly inappropriate. The stock of many corporations has no par value. Where it has one, the company may be overcapitalized, for stock watering has been a flagrant abuse in the history of many public service corporations. Then too, bad management may have caused the loss of some of the assets or depreciation of the company's plant, so that the capitalization no longer represents the present value of the property. In such cases, rates of return based on par value would force consumers to pay returns on property which does not exist. In other cases there may have been appreciation of the company's plant (e.g. through reinvestment of earnings), not reflected in the nominal value of the outstanding shares, in which event a return based upon par value would be unfair to the company.

The market value of the company's property, as reflected in the price of its shares, is an equally unsatisfactory basis for valuation. The market value of any investment is based upon the return which the purchasers expect to derive from it, and this return depends largely on the price which the company is now receiving for its product. If the price is already too high, the market value of the stock will be correspondingly great, and a price for its service fixed on the basis of such an excessive valuation will usually be as high as the price already prevailing. To fix prices on such a principle would involve the regulatory authorities in a circle, by which they would arrive at the same point from which they started. Let us suppose that a gas monopoly, whose plant actually cost $100,000 to build, can, by charging extortionate prices, get $16,000 in profits annually—a return of 16 per cent. Assuming that 8 per cent is a normal return to enterprisers for capital and management in such industries, it appears that this company is making double the profits to which it is fairly entitled. Its securities, other things remaining equal, will sell for about double the cost of the plant, or $200,000. Suppose now that the regulating authority sets out to establish a fair rate for this corporation, and decides to allow it 8 per cent on its market value of $200,000. It will have to establish rates at exactly the level at which they now are, for no lower figure will provide a fair return upon such a value. Market value, therefore, fails to protect the consumers. Some other basis for rate regulation must be found. This narrows the problem to a choice between original and reproduction cost.

Original Costs (Prudent Investment) and Reproduction Costs.—Both terms may have a variety of meanings. Original cost may refer to actual expenditures incurred in constructing the plant and building up the business, including many items that were extravagant, wasteful, or even corrupt. On

the other hand, it may be confined to expenditures honestly and prudently made for property that is actually useful for providing service to the customers of the company. In the latter case, the term "prudent investment" is sometimes employed. Reproduction cost may mean the present cost of reproducing a plant identical with the present one, or it may refer to a substitute plant more modern and, therefore, capable of producing the service more efficiently. It may even be construed to mean the cost of reproducing an identical plant under precisely the same conditions as the existing plant was constructed. In this case, it becomes practically the same as original cost.

The commissions and the courts are tending more and more towards reliance on prudent investment as the most satisfactory principle of valuation, because it has the advantages of definiteness and stability. It is held to be fair to consumers, because it will require them to pay a return to the investors only for what it has actually cost the latter to provide plant facilities, without dishonesty or reckless extravagance; and it is believed to be fair to the companies, because it yields them a return on their actual investment, in so far as it was honestly and prudently made. However, this method is open to the objection that it does not allow for changes in the price level since the time when the plant was constructed. This means that those consumers who are served by plants that were built in periods of high prices must pay higher rates than those who are served by plants constructed when prices were low. This violates the law of one price.

The reproduction cost principle has the advantage of being more adaptable to changing conditions. It avoids the error of not making allowance for changes in prices and costs of construction. However, it has two practical disadvantages. First, it is uncertain and conjectural. What it will cost to reproduce a plant is a matter of estimate, on which the opinions even of expert engineers frequently differ widely. In particular, company engineers are likely to pad their estimates with every conceivable cost that will lead to high valuation, while those employed by the commissions, in their zeal to protect the public interest, may scale their estimates down to unreasonably low figures. The second disadvantage consists in the fact that reproduction cost is ever changing, requiring frequent revaluations from time to time, with corresponding alterations of rates.

If competitive normal value is to be the criterion for rate making, then the reproduction cost of an efficient substitute plant should be the basis for valuation. In the price-making process of the market it is prospective costs, not past ones, that are controlling. Past costs are significant only for the light they may shed on what costs are likely to be in the future. Furthermore, in competitive industries prices tend towards optimum costs—that is, towards the lowest average costs of an optimum plant What it has actually cost to build other than optimum plants is of no significance in the long run, because the business will eventually go to those who supply the product

most cheaply. Competitors whose expenses are higher must meet the prices of optimum producers, or fail.

If the reproduction cost principle is ever to be adopted, some method of meeting the two objections to it must be found. As we make progress toward stabilizing the price level by suitable measures of monetary control, it will no longer be necessary to make frequent revaluations to compensate for changes in the purchasing power of money. That will meet one of the difficulties. As for the other, if the principle were once generally accepted, a technique for estimating reproduction costs that would be reasonable and just could probably be worked out on the basis of experience. Perhaps the actual construction costs of new plants being erected here and there from time to time could be used to figure what the reproduction costs in a given place ought to be.

Intangible Values. Depreciation.—There are various other knotty questions that arise in valuation matters. For instance, how much should be allowed to the company for expenses incurred in developing its business, such as securing franchises and building up an organization, that are not embodied in materal equipment? Some allowance should surely be made for actual costs of this kind, if honestly and prudently made; but no claim should be allowed for exclusive franchises or other monopoly values, nor for good will.

Then there is the question of depreciation, which presents a twofold problem In the first place, it is clear that the company should be permitted to include in its costs of operation some allowance for current wear, tear and obsolescence of its plant; but how much it is entitled to for this is a matter of controversy. We shall not go into the technicalities of this. Suffice it to say that the company should not be permitted to charge an excessive amount, in which there is concealed an element of monopoly profit. The second problem has to do with the matter of determining the fair value of the plant. Suppose the plant has been allowed to deteriorate in the past, so that it is not now in first class condition. Should something be subtracted from its original or reproduction costs because of this depreciation? The practice heretofore has been to make such a subtraction, but it would be more nearly in accordance with the norm of competitive markets not to do so unless the deterioration has reached a point where the service is impaired; for, under competitive conditions, a concern can get the same price as its rivals, so long as its product is as good as theirs, regardless of the condition of its plant. Depreciation will bring its own penalty to the company in time, if they have made no allowance to take care of it, through the gradual loss of the material means with which to render adequate service.

The Gross Profits of Regulated Companies. Fair Return.—Included in the rates fixed by the regulating authorities must be an adequate (but no more than adequate) return to the investors and managers of the enterprise.

Fixing the fair value of the property does not answer the question of what this return must be. The regulating authority must still decide what wages of management (that is, salaries) can reasonably be paid to the executive officers of the corporation, and what is a fair rate of return to the investors

The concept of normal competitive price does not altogether determine the matter of salaries, because the market does not fix a normal wage for business executives. The public utility commissions must use their judgment here, refusing to allow the companies to include in their costs arbitrarily high salaries that conceal an element of monopoly profit, yet allowing a sufficient compensation to attract competent managers.

The rate of return to investors must include both pure interest and reward for risks. Economic theory does not say what this rate should be in numerical terms. Comparison with market rates currently yielded in other industries is of some help here, but it is not definitive because it is not possible to find other cases that are closely comparable In particular, the risks of public utility enterprises are less than those of unregulated industries, because the utility companies have an established monopoly position that is protected by the law. Probably the most practicable rule to follow here is to fix a rate of return just high enough to attract capital into the regulated industries

The Yardstick Idea.—Since the establishment of the Tennessee Valley Authority, the notion has become popular that such a governmentally constructed and operated plant can be used as a "yardstick," or standard, for determining reasonable rates Conceivably the rates charged by private utilities could be fixed at the same levels which are found to be adequate in publicly owned establishments This method would have the great advantage that it would sidestep the difficult problems of valuation and fair return. The notion is not an unreasonable one if the government plant is efficiently constructed and operated. It then might be taken as equivalent to the optimum plant of competitive industries, and thus, as an indication of the optimum costs toward which prices might be expected to gravitate if the industry were on a competitive basis. However, if this yardstick method is to be used, the methods of accounting employed must be comparable to those which would be good practice for a private enterprise, and the government must not take advantage of especially favorable circumstances which it enjoys, such as low interest rates, that are not possible for private enterprises. Neither must it allow some costs to be charged up to other activities that could not be so diverted by a private company For instance, if a dam is constructed by the government both for generating electric current and for flood control, it might be difficult to say what part of the costs should be charged to the latter purpose. If too much is so charged, comparison of the costs with those of a private electric power plant might not be fair to the company

Specific Rates and the Problem of Price Discrimination.—The determination of what constitutes a fair return on the fair value of the property in a

given case merely fixes the general level of rates which should be allowed. It establishes a criterion for the rate schedule as a whole, but it does not determine the rates in detail. Many public service corporations produce more than one good, and nearly all have different classes of customers to serve. To illustrate: railroads transport both freight and passengers; a water system supplies water for both fire hydrants and household use; gas is used for both industrial fuel and domestic cooking and heating. The companies usually differentiate between their different classes of customers, charging different rates according to circumstances. For instance, an elaborate system of classified freight rates is in use on American railroads, differing according to the type of commodity carried. Gas companies commonly sell gas at relatively low rates to industrial users (where the companies have to compete with coal and oil used as industrial fuel) and at somewhat higher rates to households (where the gas is used principally for cooking—the only real competition in this case being from electricity, whose high cost as a cooking fuel makes the competition less effective). Electric and telephone companies commonly discriminate between those who telephone at the busiest ("peak") hours, and those who use their phones at slack ("off-peak") periods. These cases raise the problem of distinguishing between reasonable and unreasonable price discrimination

This is a problem that arises mainly out of the monopolistic character of the utility industries. In open competitive markets, the law of one price commonly prevails. It is made effective by the fact that, where there are many sellers whose prices are openly known, a buyer always may have recourse to the lowest seller. This compels all other sellers to meet his price. However, where there is a monopoly, the buyers have no such recourse. This tempts the monopolist to take advantage of his position by charging a high price to those customers whose need is greatest or who can afford to pay the most (thus getting a large profit on those sales), while taking on additional business at less profit by selling at lower prices to those buyers who are at or near the margin on the demand curve. Monopolies can do this more easily if the lower prices to the favorite customers are kept secret, as was the case in the secret rebates which were once so prevalent in American railroad practice. In all the public utilities the danger of unreasonable discrimination is present unless it is prevented by the government; hence, the scrutiny of specific rate schedules is an important part of rate regulation.

Fair and Unfair Price Discrimination.—The problem is complicated by the fact that some kinds of discrimination in rates are reasonable and proper. For example, some commodities hauled on freight trains require more space in proportion to their weight than others, and some require special care in handling It would hardly be fair to compel the railroads to fix a flat rate per ton-mile for all commodities. Again, some people use electricity at the busy hours of the day, when the load on the power plant is at its peak, while

others use it chiefly in the slack hours. The company must maintain a plant of sufficient capacity to meet the peak load, yet much of this capacity will be idle in the off-peak period. It is in the interest of social economy to reduce this idleness, encouraging the off-peak use of electricity by low rates, while charging a higher rate to the peak users, whose concentrated demand is what necessitates the extra plant capacity.

There are economic principles which can be applied to develop rules for distinguishing between fair and unfair price discrimination. In supplying different classes of customers, there are usually two groups of costs. There are separate costs, directly occasioned by each particular class of buyers, and common costs, associated with the operation of the business as a whole, but not separately chargeable to any one group of customers. For example, such items as reading meters and the rendering and collection of bills are clearly chargeable to the customers directly concerned, while such fixed factors as administrative salaries, insurance, interest on capital, and taxes, are common costs.

The first rule here is that each class of customers should pay its own separate costs, for if any good is sold at less than the cost clearly incurred in producing it, the principle of opportunity costs is violated. This provides a basis for reasonable discrimination between the different classes of users. For example, if it can be clearly demonstrated that it costs more to transport passengers than freight, or to serve domestic than industrial users of gas, or more for retail than for wholesale buyers of a commodity, the high cost users in each case may properly be charged a higher rate.

The real problem concerns the common costs. Here a distinction must be made between those cases where the economic theory of joint supply can be applied, and those where it cannot. A true case of joint supply is one in which, in the making of one product, another is *necessarily* produced. For instance, both gas and coke are produced simultaneously in the one process of heating bituminous coal, so that the cost of the two commodities cannot be separated up to the point where they emerge from the ovens. In such cases, the rule of the competitive market is that whichever of the two (or more) products is in greatest demand must bear the major share of the joint costs, the other product being sold for whatever price it will bring. This rule is conducive to social economy because, since the less valuable good occurs incidentally and necessarily as a by-product, it is better to sell it for whatever it is worth than to throw some or all of it away.

Now this principle is applicable to different users of the same commodity, if their demands come at different hours of the day or different seasons of the year. To illustrate, electricity for domestic lighting is used chiefly in the early hours of the evening. If a power plant has been built primarily to serve this demand, it must have sufficient capacity to meet the load that comes at the hour of greatest use As a result, there will be excess idle

capacity at other hours. This idle capacity is a true joint product. It is a *necessary* result of supplying the peak service to customers. It is, therefore, sound economy to utilize this capacity to serve other customers at lower rates, if such rates are necessary to attract off-peak business. This discrimination is not injurious to the peak users; on the contrary, it is actually beneficial to them. For, if the extra business were not taken on (and it would not be if it were charged a higher rate), the peak users would have to bear all the burden of the fixed plant costs; whereas, if the rates to off-peak users are low enough to attract their business, these users will bear a part of the overhead, so that the rates to the peak users can actually be reduced somewhat. At the same time, the social income is increased by the amount of extra electricity that is thus produced and used. The same principle justifies some discrimination in rates between day and night users of telephone and telegraph services, and it applies to a railroad or motor-truck company, where its cars or trucks are heavily loaded when moving in one direction, but which have excess capacity for the return trip. There are many other cases where it can also be applied.

Where the common costs are not truly joint, there appears to be no reasonable basis for allocating them unevenly between different classes of customers. Here the only fair principle is to divide them equally. This will apply, for example, where the peak load of different users comes at the same time, as in the case of domestic and business subscribers using telephones in the daytime.

Legislative Treatment of Price Discrimination.—There has been a good deal of legislation, both federal and state, designed to protect consumers from unreasonable price discrimination. The Interstate Commerce Act (1887) forbade railroad rebating, and the Clayton Act (1914) prohibited price discrimination between different purchasers in domestic trade where its effect is to restrain competition or create monopoly. The Robinson-Patman Act (1936) forbids discounts on quantity purchases which are not based on actual differences in the cost of filling such orders. There are various state laws of similar content. In trying to enforce these laws, the Interstate Commerce Commission, the Federal Trade Commission, and the public utility commissions of the various states have been groping toward some standard by which to judge between reasonable and unreasonable discrimination. The tendency has been to rely, as far as possible, on differences in costs, where such differences can be found, but no clear-cut principle has been developed by these bodies for dealing with those costs that are truly common. As a result, there is probably much that is arbitrary and unfair in existing public utility rate schedules, and especially in the classified freight rates that are in effect on our railroads. The rules developed above seem to offer the proper solution here. They afford definite criteria that are capable of practical application.

Collusive Price Agreements.—Where, as in the cases so far considered, the existence of monopoly is clearly apparent and unavoidable, the protection of consumers from unfair prices presents a clear-cut problem. The monopolies can be legally recognized as such and a public body created to fix the prices of its products. It is probable that this technique will be extended as the monopolistic character of more and more industries is recognized and they are placed in the category of public utilities However, there are many cases, lying somewhere between monopoly and competition, where prices may be higher than costs, so that the consumer is open to exploitation from which he is entitled to some protection Under our antitrust laws, combinations in restraint of trade are prohibited, and agreements among ostensibly competing businessmen, fixing the prices at which they will sell their products, are illegal However, it is sometimes very difficult to establish the facts in such cases Various devices, such as informal agreements, open-price associations, price leadership, and the like (described in Chapter III) may lead to consumer exploitation without being readily discovered. Ingenious new schemes are evolved by astute lawyers or cunning business executives from time to time, which have the effect of maintaining prices at certain figures while not appearing to do so.

Under our present laws it is the duty of the authorities to prosecute if the existence of price agreements can be clearly shown, and the Federal Trade Commission has power to prohibit such practices. However, it is difficult to enforce such laws because price agreements can be made in such a way that it is hard to prove their existence. No public body has yet been given the authority actually to regulate prices in cases of this kind, but the time may come when the Federal Trade Commission may be clothed with such power in industries where it finds that the competitive price-making forces are ineffective in protecting consumers

Retail Price Maintenance and Exclusive Contracts.—There is a practice, known as retail price maintenance, that is quite common in American industry. It consists in the sale of branded commodities to the final consumer at retail prices stipulated by the manufacturers. Since this is only possible where the commodity is protected by patents or trademarks which permit the product of a particular manufacturer to be clearly identified, it is of a quasi-monopolistic character While it is claimed that the practice has the advantage of promoting stability and protecting dealers against ruthless price cutting (as explained in Chapter VI), it may be abused in that prices are sometimes set so high that the consumer is exploited and exorbitant profits are realized by both manufacturer and dealers. This is undesirable.

Under present laws it is legal for a manufacturer to fix the retail price of his product, and in some states laws have been passed making it illegal for dealers to sell such products at less than the prices so fixed. The United States Supreme Court has ruled that these laws are constitutional. However,

certain questionable methods of enforcing adherence to prices set by the manufacturers, and of punishing dealers who sell below that price, are illegal. In particular, exclusive contracts, by which manufacturers of standard products bind their dealers not to handle the similar products of competing manufacturers, are illegal under the antitrust laws. It is apparent that such contracts constitute a method of unfair competition which can be used to give to the manufacturers employing it a monopoly in their trade. This weapon has in fact been so used by some of the monopolies in our history.

Economy would seem to require that dealers be allowed to sell goods at as low a price as will cover their costs. To permit manufacturers to force a higher price is to deprive consumers of the advantage of low cost methods of retailing (such as those of the chain stores) and to encourage the survival of inefficient retailers who are protected from price-cutting competitors This is wasteful. There may be some reason to protect dealers from competitors who offer certain commodities (known as 'loss leaders") at prices below cost, merely as an advertising device to attract customers into their stores; but, in general, the laws encouraging the maintenance of retail prices at figures fixed by manufacturers constitute a dubious policy. Serious exploitation of the consumer is not likely to arise from this type of activity, however, for if the prices of trade-marked goods are fixed at too high a figure in industries where there is some measure of competition, the opportunity for profits so occasioned is likely to attract competing products into the market at lower prices. So the policy of price maintenance may defeat itself

Basing-Point Price Systems.—There has been a great deal of controversy over the practice, prevailing in some industries, of quoting delivered prices, made up of the mill price at certain manufacturing centers, known as basing points, plus freight charges to the place of delivery For instance, Pittsburgh is an important basing point for steel. If an automobile manufacturer in Detroit purchases steel, he must pay a price equal to the price at the mill in Pittsburgh, plus the freight from that city to Detroit, although the steel may actually come from a Detroit steel plant. A similar practice prevails in a number of important industries, including cement, sugar, lumber, glass, rubber, paper, and some of the metals. Usually basing points are established at the principal centers of production. Purchasers then pay the mill price quoted at the basing point nearest to them, plus freight to the place of delivery, and all producers (wherever located) will charge him that same price. A mill located between two basing points, and delivering its products in the territory covered by each, may thus quote different prices to different customers For instance, a steel mill located in Detroit will sell alloy steel bars in South Bend, Indiana (where Studebaker cars are made) at the Chicago price plus freight from that city to South Bend, but it will

sell steel in Buffalo at the Pittsburgh price plus freight from that city to Buffalo.

While the basing point system does not necessarily do away with all competition in an industry, it does restrict its operation, for it means that manufacturers quote prices based, not upon their own costs of production, but upon quotations reached by a certain measure of trade agreement. It permits a given plant to charge a high price on its local trade, affording it a substantial profit which it cannot get on its business in other cities. The Detroit steel mill, for instance, is able to pocket the freight charges which the Detroit customers must pay. This involves discrimination against those customers located in Detroit in favor of those located in Pittsburgh. Pittsburgh manufacturers pay the Pittsburgh price for their steel, without the addition of freight charges, but manufacturers in Detroit must pay the Pittsburgh price plus the freight charges, even though the steel is manufactured in Detroit. They are prevented from taking advantage of the economy presumably effected by the local manufacture. The strongest objection to the basing-point system is that it interferes with the geographic division of labor, for it encourages the concentration of industries near the basing points for their principal raw materials, when it might be more economical for them to locate elsewhere. A fairer system would be for every plant to quote prices f.o.b. the point of manufacture, allowing the customers to buy where they please and pay the freight themselves Under such an arrangement, prices are more likely to be based on actual costs, and production is more likely to be guided economically.

The legal status of the basing-point system is somewhat uncertain. Prior to 1945, if the basing points were sufficiently numerous and scattered, the courts would uphold the system, but not otherwise. In 1924 the Federal Trade Commission succeeded in breaking up the "Pittsburgh Plus" plan, by which all steel buyers, no matter where located, were compelled to pay the Pittsburgh price plus freight to the point of delivery. A multiple basing-point system was set up in its place. The commission attempted to break up the basing-point system in the Portland Cement industry, but it was overruled by the Supreme Court. In 1945, in the important Corn Products Refining Company case, the Supreme Court unanimously declared illegal the basing-point system in the corn products industry. On the basis of this decision it seems likely that other basing-point systems will be outlawed, although the exact significance of the court's pronouncement is still in doubt.

Summary

It is the function of the price system to guide and balance production. By "price system" is meant the price relationships between particular goods (values)—not the general level of prices. Justice requires that particular

prices be fair to all parties. The competitive pricing process, which equates supply and demand at marginal costs in the short run and at optimum costs in the long run, makes for economy by directing production towards the channels of greatest demand, on the principle of opportunity costs. However, the following obstacles interfere somewhat with this economy: (1) consumers' demand does not always represent wise choices; (2) inequality of incomes diverts production from the needs of the poor to trivial whims of the rich; (3) inefficiencies in production prevent costs from falling to their optimum; (4) frictions prevent perfect adjustment of supply to demand; (5) inflexible prices aggravate this maladjustment; (6) monopolies prevent prices from reaching their competitive normals; and (7) our unsatisfactory monetary system, with its inflation and deflation, distorts price relationships. Given a program for removing these obstacles, the price system would constitute a satisfactory guide; therefore, normal competitive prices can be accepted as a criterion of fairness. Where it is necessary for the government to regulate prices, this criterion should be followed.

Price interference to protect consumers is needed in cases of monopoly, especially in public utility industries. Here the price should be fixed as close to optimum costs as possible, but court decisions require that each company be allowed a fair return on the fair value of its property. Par value and market value of securities are clearly inadequate bases for determining fair value. Original cost (prudent investment) is preferred by many because of its stability, but this makes no allowance for price level changes. Reproduction cost is objected to because of its uncertainty and instability, but it is most nearly in accord with competitive normal pricing principles. The rate of return allowed on the fair value should include pure interest and reward for risks. A good rule is to allow just enough to attract capital into the regulated industries. Another method of determining reasonable rates (one which sidesteps the vexatious problem of fair value) is to use the costs of governmentally constructed and operated plants as a standard, or "yardstick."

Where there is a monopoly, unfair discrimination in prices must be prevented by regulation. Discrimination is fair only where (1) there are clearly distinguishable differences in the costs of serving different classes of customers, or (2) where there is a true case of joint supply. There are various collusive price agreements, falling short of complete monopoly, which also present abuses that are difficult to prevent. The practice of price maintenance, in which manufacturers set retail prices, encourages high prices and protects inefficient retailers, but is permitted under existing law. Exclusive contracts, however, are illegal. Basing-point price systems interfere with economy by preventing the full development of geographical specialization.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

Literature dealing with the functions of the price system in our economy is surprisingly fragmentary and scattered. A considerable amount of comment and interpretation on this theme is to be found here and there in Hubert D. Henderson's *Supply and Demand* (1922), and Edwin Cannan's *Wealth: A Brief Explanation of the Causes of Economic Welfare* (second edition, London, 1924). Gustav Cassel develops some aspects of the problem quite effectively in the first chapter of his *Theory of Social Economy* (English translation, 1923). Chapter XVI of Ralph H. Blodgett's *Principles of Economics* (1941) also contains a good discussion of this topic. Other discussions are to be found in some of the works on socialism cited at the close of Chapter XXVIII of the present volume, and some of the books on economic planning listed at the end of Chapter XXX. Raymond T. Bye is working on a volume, to be entitled *Social Economy and the Price System*, which has not yet been published.

Recent interest in the problem of inflexible prices has been stimulated by Gardiner C. Means' study, entitled *The Structure of the American Economy* (1939). This subject is presented in an interesting and more popular way by Mr. Means and Caroline F. Ware in their *The Modern Economy in Action* (1936).

The problem of regulating public utility rates is dealt with rather fully in the general texts on public utilities cited at the close of Chapter V. In addition to these, mention should be made of H. H. Hartman's *Fair Value* (1920). Arthur Burns' *Decline of Competition* (1936) contains a good deal of discussion on monopolistic price policies. The Federal Trade Commission has made a special study of basing point systems in *The Basing Point Formula and Similar Prices* (1932). Leverett S. Lyon and Victor Abrahamson deal with the problem of informal price agreements in their *Economics of Open Price Systems* (1936). For a discussion of monopoly prices and of the problems of price regulation in general, see Chapters XI and XX of Eliott Jones' *The Trust Problem in the United States* (1921). E. T. Grether's *Price Control Under Fair Trade Legislation* (1939) deals exhaustively with retail price maintenance, especially as revealed in California experience. Walton Hamilton and associates present a series of case studies on prices in a number of important industries, with two general chapters, in their *Prices and Price Policies* (1939).

CHAPTER XX

Agricultural Price Problems, and Wartime Price Controls

A. Control of Agricultural Prices

The Pressure for High Prices.—Because competition tends to keep prices equal to optimum costs, it limits the possibilities for gain. Producers seek to escape this check to their ambitions by securing some monopolistic or differential advantage. If they cannot obtain profits which they consider adequate by ordinary business activities, they may bring pressure to bear on the government for protective tariffs that will shield them from foreign competition, or for direct subsidies out of the public treasury. Or, they may agitate for legislation which will maintain prices at more lucrative figures. Especially when prices are falling there is strong pressure for government action to fix minimum prices which will save producers from loss. Enterprisers in declining industries may attempt to stave off the inevitable effects of shrinking sales by governmental aid of one kind or another. During the great depression of the nineteen thirties there was so much agitation of this sort that measures designed to keep up the prices of many commodities were adopted throughout the world. Controls so established at times of stress are likely to be maintained long afterwards, for producers, once freed from some of the effects of competition, are loathe to relinquish the advantages of prices that have been artificially boosted for their benefit. Hence what began as emergency legislation continues as a permanent policy.

Following the First World War, and particularly after 1929, a number of attempts were made in various parts of the world to control artificially the prices of certain staple commodities, including wheat, sugar, rubber, coffee, petroleum, zinc, tin, lead, cotton, nitrates, tea, and aluminum. In some cases the efforts at control were confined to one country, in others they were international in scope. In the United States there was put into effect an ambitious program for the control of several staple farm crops (including wheat, corn, cotton, and tobacco) for the purpose of raising their prices. It will be instructive to consider several of these cases.

The Case of Rubber.—When the growing use of automobiles created a tremendous demand for rubber tires, rubber growing became so profitable that large plantations were started in the British and Dutch East Indies,

which soon became the principal source of the world's supply. Too many trees were planted, however, as a result of which the price of rubber, which in 1912 had averaged $1.12 per pound, fell to 17¢ in 1922. With heavy losses confronting its rubber interests, the British Government passed legislation designed to raise the price of rubber. The law restricted the exportation of rubber from British colonies to a certain percentage of the estimated "standard capacity" of each plantation, this percentage varying with the price of rubber in London. The restriction was made effective by a prohibitive tax on all exports in excess of the percentage of capacity established. At one time producers were allowed to market only sixty-five per cent of their standard output. Since Britain then controlled two-thirds of the world's rubber supply, this curtailment of exports succeeded in raising the world price of rubber for a considerable period. The increased price, however, stimulated an increase of rubber planting outside of the British Empire. There resulted an increase in the supply of rubber, which again lowered its price and defeated the efforts at control. For a time the British were forced to abandon their scheme, but in 1934 a treaty was effected between Great Britain, the Netherlands, France, India, and Siam, which set up a plan of international control along similar lines. The quotas were then fixed by an International Rubber Regulation Committee instead of by the British alone. This plan was operating successfully up until the Second World War, but there is no telling how it would have worked out in the long run. There were other regions (such as Brazil) that might have become potential competitors under the stimulus of a profitable price, and the synthetic rubber industry (then in its infancy) would have a more favorable opportunity to develop, the higher the price of rubber was forced.

The Case of Coffee.—By similar measures, in the nineteen twenties the Brazilian government undertook to protect its coffee growers from disastrous fluctuations of coffee prices. These fluctuations are likely to be very violent, because the coffee crop is subject to extreme variations from weather conditions. To offset this, the government required all coffee to be delivered to its warehouses, whence it was released for export only in sufficient quantities to maintain a price regarded as satisfactory. During the early years of the plan, it was possible to hold over enough of the surplus crop of good harvests until times of shortage, thereby stabilizing the price from season to season. The semimonopoly position of Brazil, which produces two-thirds of the world's coffee supply, led to this apparent success. However, the price was held so high that the same results followed as in the case of British rubber New coffee trees were planted both within Brazil and elsewhere, so that it became necessary to hold so much coffee in storage to maintain the prices established that coffee prices were finally forced down. The government then resorted to the destruction of surplus coffee. As many as 14,000,000 sacks of coffee were burned or dumped into the sea in a single year. This is about

equal to the annual coffee exports of the country, and about half of a good year's crop. When it is realized that this coffee had to be paid for out of taxes levied on the Brazilian people, the terrific cost of the program will be apparent. The plan could not have been maintained very long without the coöperation of other coffee producing countries. During the Second World War, an international program of control was put into effect. It remains to be seen how this will work out in the future.

Overcapacity in American Agriculture.—For some decades a condition of overcapacity has existed in American agriculture, as a result of which the prices of many farm products have declined in relation to (or have not risen in proportion to) other prices. This overcapacity is the result of several factors. For one thing, the liberal public land policy of our federal government has encouraged the continued opening up of new lands for farm use. Another potent cause has been the striking improvements in agricultural machinery and methods of farming that have taken place within the past generation, constituting a veritable industrial revolution in agriculture. Agricultural schools and colleges, government bulletins and farm agents, and farm magazines have hastened the adoption of the new methods. Then, during the two world wars, the stimulus of temporary increases in European demand for American farm products led to the extensive conversion of grazing and other lands to staple crops, with a marked expansion of durable agricultural equipment. Since there has not been a permanent increase in the demand for farm products commensurate with this growth, the prices of agricultural commodities have been forced down below the costs of marginal farmers, and perhaps in some cases even below optimum costs.

There are natural forces inherent in the price system that would tend to correct this condition in time. Low prices, by causing the farmers to lose money, would gradually drive them into other occupations, until the output of farm products was brought into balance with the demand. Something of this sort has in fact been taking place. For a long time there has been an exodus of people from our farms, induced by the low standards of living prevailing there as compared with those enjoyed by urban populations. But this process of adjustment has been slowed up by the fact that, when lands have once been improved, with farm buildings erected and families settled upon the farms, the corrective action is very slow. It has actually been reversed from time to time by such events as the two world wars, which temporarily restored a considerable measure of prosperity to the farmers, and by business depressions, which drive unemployed city workers back to their childhood farm homes, where they can help to raise food with which to sustain themselves. Hence, a general condition of overcapacity has persisted, with a resultant depression of farm prices. The distress occasioned by low farm incomes has led to great pressure from rural districts for government action to bring prices to more profitable levels.

First Proposals for Agricultural Price Control. The Federal Farm Board.—A number of the measures first proposed were based upon the general principle that the federal government should guarantee a high domestic price for certain basic farm crops by buying the surplus which could not be sold at these prices. This surplus was then to be sold in foreign markets for whatever it would bring. It was expected that there would be a loss on such exports, but this was to be recouped by some sort of tax or fee which would come, in the last analysis, out of the pockets of the taxpayers. In substance, this meant that the general public was to be taxed to pay a subsidy to the farmers. In 1929, a Federal Farm Board was created to carry out such a plan, among other objectives. It was given five hundred million dollars, which it used to finance a Grain Stabilizing Corporation which bought part of the wheat and cotton surpluses, hoping thereby to raise the prices of those commodities. However, it could not cope with the prevailing condition of world depression. In spite of its efforts, wheat and cotton prices continued to fall sharply, and the board found itself with great stocks of both commodities on its hands which it could not dispose of without heavy losses. The operations of the board were so unsatisfactory that in 1933 it was abolished and a new farm relief plan, under the Agricultural Adjustment Administration (AAA), was inaugurated.

The Agricultural Adjustment Program.—This program was adopted by the Roosevelt administration following the great depression of the 1930's. After some experiment and modification, it seems now to be established as a permanent policy. Its announced objective is to maintain the "parity" of farm prices with those of nonfarm commodities. Parity is defined as that relation between the prices of the two groups of commodities that prevailed during the period 1909 to 1914. That is, if nonfarm prices in a given year have risen to, say, ten per cent above their 1909-1914 index, then farm prices are to be forced up by a like percentage.

Under this program farmers are encouraged to withdraw part of their acreage from the cultivation of staple crops and to devote the lands so withdrawn to soil conserving purposes, such as the growing of legumes or the planting of trees. As an inducement, the federal government makes "parity payments" of a certain amount, per acre withdrawn, to those farmers who make the withdrawals. Since these payments come out of the federal treasury, they are borne by the tax-paying public at large. A second part of the program consists in the fixing of market quotas for individual farmers when estimates of the Department of Agriculture indicate that the prospective supply of certain crops is likely to be so large as to depress prices below parity. These quotas are adopted only if they are supported by a favorable vote of at least two-thirds of the affected producers. When the quotas are once established, fines are imposed on those farmers who market supplies in excess of their quotas. Thirdly, the program embodies the principle of

an "ever normal granary," by which surplus crops that occur in years of abundant harvest are withdrawn from the market and stored, ostensibly for later release in years of shortage. This is accomplished by loans of federal funds to farmers on very favorable terms for the purpose of financing such storage Finally, the Department of Agriculture is given thirty per cent of the gross revenues derived from import duties for the purpose of buying up and disposing of surpluses. Some of the commodities so acquired are donated to state welfare agencies to be given away to the needy poor. Some are given to school authorities to provide school lunches for undernourished children. Some are disposed of through the food stamp plan which will be described below.

Under this program, farm incomes during the period between the two world wars were substantially increased by the combination of higher agricultural prices and government parity payments Farm prosperity was further improved by the great demand for agricultural raw materials and foodstuffs during the Second World War.

Critical Appraisal of Minimum Price Control Measures.—If these various measures of minimum price control are examined in the light of experience, and on the basis of their desirability as a means of promoting sound economy, certain observations and principles emerge:

(1) Undoubtedly there are situations in which measures of intervention to protect producers from disaster resulting from low prices may be desirable The existence of overcapacity in an industry (such as agriculture) where the process of adjustment is likely to be slow and painful, is one such situation The corrective action of free prices in such cases is unnecessarily cruel Intelligent governmental intervention to ease the readjustment is in line with the trend toward replacing the spontaneous forces of free enterprise by centralized planning and guidance Also, in times of unusual depression there is some justification for giving temporary relief to industries that are especially hard hit, provided they are not in a position of permanent overcapacity If the normal output of the industry is no more than sufficient to meet the demand in ordinary years, it would be unfortunate to have some firms driven out of business by a temporary depression. "What is wanted here is to enable whole bodies of existing producers to weather the storm, so that there may be no destruction of capacity which will be required when the demand recovers to its previous level, as it may be expected to do in due course Under *laissez faire*, the trouble is that perfectly efficient producers may be sunk by the temporary violence of the storm, and when the storm is over, other similar ships will have to take their place."[1] Here, of course, only temporary control is justified The difficulty is that controls once started to meet emergencies are likely to be continued indefinitely if they succeed,

[1] J W F Rowe, "Artificial Control Schemes and the World's Staples," in *Index* (a publication of Svenska Handelsbanken Stockholm) for April 1935

and the prices aimed at are likely to be considerably above the optimum costs of production. Finally, there is much to be said in favor of a general policy of industrial planning to prevent the occurrence of over- or under-capacity, and to preserve a balance between the supply and demand of commodities.

(2) In all these cases the ultimate objective of intervention should be the restoration of prices to their normals. In other words, the prices aimed at should be as close to the optimum costs as possible. For practical purposes, the costs of modal producers should probably be taken as the criterion. Prices should not be fixed high enough to protect inefficient producers. The idea that the price relationships prevailing in some base period can be taken as a norm toward which to aim is not consistent with this objective. In the actual world it would be practically impossible to find a time when price relationships are in close conformity to their normals, and even if they were, these relationships would not be valid for a subsequent period, because normal prices vary through the years. This reasoning is applicable to the parity concept on which our Agricultural Adjustment Program is based. There is no reason to think that the relation between agricultural and non-agricultural prices from 1909 to 1914 was a normal one, and even if it was, it might not be normal for today. In an industry where technological improvement is as rapid as it has been in agriculture in recent decades, prices ought logically to be falling in relation to other industries where new methods have been less revolutionary.

(3) Generally speaking, each industry should stand on its own feet. Except for temporary relief in times of unusual stress, it should not be subsidized by largess, such as parity payments from the public treasury. When the prices of an industry have been brought to equality with optimum costs, the factors used in the industry are being paid what they are worth to the social economy by the test of opportunity costs. A temporary subsidy to meet special emergencies may sometimes be justified, but this remedy should be used with great caution because it is likely to create a pressure for continuance of the subsidy long after the emergency has past, and it is likely to retard the readjustment of supply to demand by making the subsidized industry prosper in spite of its overcapacity.

(4) Where there is basic overcapacity in an industry, attempts to force up the prices of its products by withholding part of the output from the market *after the goods have been produced* are likely to fail because they do not get at the source of the trouble, which is overproduction. By making a farm crop profitable in spite of its excessive supply, such measures encourage a further increase in the output, thereby aggravating the problem. The cases of rubber, coffee, and the United States Farm Board support this observation. Furthermore, such measures are uneconomical because goods once produced are wealth if they are worth anything at all above the cost of harvesting and

processing them. Society is, therefore, poorer if they are destroyed or wasted. It is better for the community for them to be sold at whatever price they will bring, and thus be put to *some* use, even if the price does not cover all the costs of their production.

(5) The only effective remedy for overcapacity is to withdraw some labor and capital from the industry concerned. Temporary relief must not be used in such a way as to prevent or unduly prolong such withdrawal. The government can ease the process of curtailment by helping to find opportunities elsewhere for the productive factors that are being displaced The reasoning of Say's law supports the view that these factors can be utilized in the economy to produce goods that will repay their costs, except in the condition of restricted opportunities visualized by Keynes, and even then there are always possibilities for public investment by means of which all our socially useful resources can be employed. In the case of agriculture, the conversion of extramarginal lands to forests, flood control, soil-conserving crops, public parks, and the like is all right, provided the need for these things can be demonstrated, and provided also that the policy is not used as a screen for holding in idleness land whose cultivation for ordinary crops would be socially desirable

(6) Even where overcapacity has been eliminated by spontaneous adjustments or careful planning, such industries as agriculture are bound to have occasional temporary surpluses due to unpredictable weather. In such cases, it is good economy to store the excess for later release in years of short crops Professional speculators do a certain amount of this as a matter of good business, but it can be argued that it can be done better by the government, because it can take a longer view of the future and so balance good and bad years over a greater stretch of time. The argument is valid, but there is always a danger that the storage of surpluses will be used to protect agriculture from the penalties of overcapacity, thus perpetuating a condition of overproduction that increases the size of the crops in storage to an amount far exceeding the needs of lean years. Pressure will be brought by the industry to prevent the surplus from ever being thrown back on the market, with the result that it must be disposed of wastefully, at great loss to the taxpayers who paid for its original withdrawal. Since this has always been the outcome of such schemes in the past, their use is of doubtful wisdom

The Food Stamp Plan.—Another method of disposing of surplus crops that has attracted considerable attention is the Food Stamp Plan which was used by the United States Department of Agriculture for some time prior to the Second World War Since this plan constitutes a novel departure from the usual workings of the price system, it is pertinent to the present study

The plan had two objectives: (1) to remove price-depressing crop surpluses from their regular markets, thus raising the prices of the affected crops, and so increasing the incomes of farmers; and (2) to use the surpluses

for improving the nutrition of the poor by selling them at low prices to needy persons. Two prices were thus established for the same commodity, one for the bulk of the production, to be sold in the market at large, and another, lower, one for the surplus, to be sold to a restricted group of buyers This was accomplished as follows: Families on poor relief were permitted to buy a limited number of orange stamps, these stamps being good for the purchase of staple groceries at regular prices. With every dollar's worth of orange stamps there were given free fifty cents worth of blue stamps, which were good for the purchase of certain foods that were currently declared to be surplus by the Secretary of Agriculture. The government redeemed both the orange and the blue stamps from the grocers at their face value. Funds for redemption of the orange stamps came from the needy consumers to whom these stamps were sold. Funds for redeeming the blue stamps came out of United States customs receipts, thirty per cent of which were allocated to the Department of Agriculture to be used for surplus crop disposal.

The reason for requiring the purchase of orange stamps as a condition for receiving the blue ones was to insure that surplus foods would not be substituted for foods the consumers would have bought anyway, but would be in addition to their ordinary expenditures, thus improving their nutrition and increasing the total demand for agricultural products, thereby benefiting the farmers It was recognized that the poor would reduce their food expenditures somewhat as a result of the addition of the blue-stamp foods to their diets, but it was believed that the net result would be to increase consumers' demand.[2]

Such a plan interferes with the usual operation of the price system in two ways it maintains certain prices above the figures at which they would naturally be, and the allocation is on a basis different from that of competing consumers' demands. Instead of allowing the prices of superabundant crops to fall to whatever points are determined by the market, and permitting the foods to be used in whatever way consumers would then decide, the price is artificially kept up, and the excess over what consumers will buy of their own accord at that price is virtually bought at the inflated price by the government and distributed at a loss to the poor.

As a device for maintaining agricultural prices by withdrawing surplus crops from their regular markets, the plan is subject to the general comments that were made above. It might be defended as a temporary measure for disposing of occasional surpluses in years of unusually plentiful harvests; but it was advocated as a permanent and continuing policy, presumably on the assumption that there would always be surpluses. Its proponents went so

[2] See Norman L Gold, A C Hoffman, and Frederick V Waugh, *Economic Analysis of the Food Stamp Plan* United States Department of Agriculture, Bureau of Agricultural Economics and Surplus Market Administration (Washington, 1940).

far as to say that in the long run it should provide an outlet for increased production with higher prices.[3] This makes it a very dubious policy.

Its subsidizing of the farmers, however, was thought to be mitigated by its benefits to the needy, and on this ground it received some support from nonagricultural sources. Can it be so defended? So long as poverty has not been eliminated by the constructive measures to be suggested in Chapter XXIII, some supplement to the diets of the poor by the free distribution of foods is justified. Furthermore, it is good economy to use for this purpose those foods which are more abundant, in so far as they are of the kinds that will contribute to well-balanced diets on the part of the persons needing assistance. But there is a danger in the food stamp plan that this proviso will be overlooked, because the food grants are made secondary to a program of price control. Moreover, the government could get food for the poor more cheaply if prices were allowed to be fixed freely by the market, and if the foods to be distributed were purchased wholesale instead of retail. In view of these considerations, it is difficult to avoid the conclusion that the food stamp plan was a rider, uneconomically attached to a dubious price-raising program, for the purpose of making the latter seem less unsavory.

B. Wartime Price Controls

The Broad Problem of Wartime Control.—The mechanism of prices is not adequate to direct the drastic conversion of industry from peace to war goods that is required by modern warfare. Hence, in time of war, governments have found it necessary to interfere with the spontaneous guidance of prices, and to institute direct controls over both production and consumption.

These controls can be broadly classified into three categories: (1) price control; (2) control of the allocation of factors of production; and (3) consumer rationing. If prices are to be held below levels that would be reached if the market were left free, it is necessary to establish at the same time techniques to control the flow of materials, parts, and labor to producers, and, in so far as the final product is a consumer good, a system of consumer rationing must be created. In the Second World War the major task of allocating the scarce agents of production was assigned to a War Production Board, although certain sections of this work were delegated to specialized agencies, such as the Defense Transportation Board and the War Manpower Commission. The Office of Price Administration was the primary authority for price control and consumer rationing. Adequate discussion of these controls would require a separate treatise. All that can be done here is to make some brief general comments suggested by the broad principles of pricing.

[3] *Ibid.*, p. 17

Two Kinds of Wartime Price Disturbance.—The total warfare of modern times puts two different kinds of strain on the mechanism of prices In the first place, it brings about a terrific increase in the demand for particular goods. This tends to raise the market prices of these goods far above their production costs, and far out of line with other prices. If such a rise in particular prices is permitted, enormous profits will accrue to some producers without accomplishing a sufficient increase in supplies soon enough to meet the needs for war goods At the same time, it will cause great suffering on the part of needy civilian buyers. Hence, in both the First and Second World Wars, efforts were made to prevent such price distortion.

In the second place, governments find it expedient to finance modern wars partly by monetary inflation of one kind or another. This tends to push all prices upward, with the disturbance to the relations among enterprisers, wage-earners, debtors, and creditors that are common to price level movements. If the government could recapture, by taxation and borrowing, all of the new money put into circulation through inflation, the tendency of this money to raise prices could be thwarted, but governments have not hitherto succeeded in doing this. Therefore, they resort to measures of general price control in an attempt to hold in check with one hand the inflationary forces that they have let loose with the other.

The American Price and Wage Ceiling Plan.—In the First World War the United States Government attempted to meet the price situation by setting maximum prices on a few basic commodities This would have sufficed to deal with the tendency for certain specific prices to rise way above their costs if there had been no monetary inflation, but it was inadequate to deal with the problem which such inflation produced Because of the inflation, the prices of uncontrolled commodities soon began to soar. This rise was reflected in higher prices for the factors of production. Higher factor prices, in turn, increased the costs of producing those goods whose prices were controlled, and forced an upward revision of the maximum prices that had been established initially It was found, too, that there were so many interconnections in the price system that a few prices could not be controlled without bringing related commodities within the scope of the regulations. As a result of these discoveries, the list of regulated prices grew in an ever-widening circle, until eventually it might have embraced the whole price system, had the war continued

Profiting by this experience, and fearful of the disaster that had been brought upon Europe by drastic monetary inflation during and after the First World War, the United States government in the second great conflict adopted the so called "price ceiling" plan There was created an Office of Price Administration (OPA), which in April, 1942, issued a general Maximum Price Regulation, which prohibited the sale of commodities to the general public above the prices the sellers had charged in March 1942.

Prior to this general "freezing" of prices, a number of individual industries had been placed under control, with prices frozen as of the date when control was established, or some designated previous date. For example, Schedule 6, covering iron and steel mill products, was issued April 16, 1941, and "froze" prices in the industry as of that date. It was this type of control that the general maximum regulation extended throughout industry, with but few exceptions.

Services, as distinguished from material commodities, were generally exempt from the regulation. Under the pressure of the powerful farm bloc in Congress, agricultural prices were also exempt until they should reach one hundred and ten per cent of their 1909-1914 parity. Wages were at first uncontrolled, but were later stabilized by the War Labor Board, under the "Little Steel" formula, at fifteen per cent above the hourly rates of pay prevailing on January 1, 1941, except for certain special adjustments. Rents in areas where housing shortages developed were also fixed as of given dates, selected according to the local situation. Thus the general principle was to freeze a large part of the price structure, holding it to an established pattern for the duration of the emergency. As the war progressed, individual industries were from time to time removed from the general regulation and given independent price schedules, formulated with due regard for the requirements of the industry concerned.

All ceilings were set under a congressional mandate that they must be "generally fair and equitable." They were subject to change if rising costs made them "inequitable," and if, in the judgment of the appropriate war agency (e.g. the War Production Board), the production affected was essential to the war effort and to the civilian economy. To decide what was equitable, it was found desirable to use prices in some prewar period as a basis for comparison. OPA selected the years 1936-1939 as its base period, because Congress had already selected those years for a similar purpose when formulating the excess profits tax. If it could be proved that, under the ceilings established, the average dollar earnings before taxes in a given industry were below the average for the base period, that industry was permitted a price increase.

Ceiling prices were expressed either in dollars and cents or in terms of a pricing formula. The latter technique was used where the product was not standardized, so that any listing of dollar and cents prices would have been either impossible or unreasonably complex. For illustration, in the manufacture of gray iron castings, each casting is likely to be produced on specifications set by the purchaser, and hence different from other castings. To meet this situation, each firm in the industry was required to file its established method of pricing—how much it allowed for costs of materials, labor, overhead, and profit—as of the date when control was established. Then, regardless of changing costs, the firm had to continue pricing on the

basis of the formula it filed; the elements in the pricing formula were frozen at definite levels. The formula method was also used rather generally to establish prices for new products where previous price experience was lacking. Pricing in dollars and cents was simple to understand, and enforcement was relatively easy. Formula pricing was far more difficult to administer, and the degree of real control obtained by OPA in many cases was the subject of considerable controversy.

Appraisal of the Ceiling Plan.—What is to be said of the ceiling principle from the standpoint of social economy? As a measure of peacetime price control, it would be open to serious objections. In the first place, the prices prevailing on a given date or in a given period would never all be normal ones. Since normal prices to some extent reflect optimum allocation of resources, it would be uneconomical thus to freeze an imperfectly adjusted set of relationships over a substantial period of time. In the second place, such a freezing prevents subsequent adjustments of the economic process to changing circumstances.

Besides these basic weaknesses of principle, there are several practical difficulties. The exemption of certain prices (e.g. those of agricultural products) permits the creation of price disparities that make maintenance of the ceilings difficult. Also, under the pressure of war conditions, production costs are bound to rise above the price ceilings in many cases. In the Second World War this situation was solved, partly by granting subsidies out of the public treasury and partly by a system of differential pricing (discussed below) in those cases where production could not be carried on at ceiling prices without loss. This was an expedient policy for the emergency, but it would be a very uneconomical arrangement for the long run. Then there is the difficulty of controlling the quality of the goods offered for sale. Where commodities are not perfectly standardized, it is possible to evade the price ceilings by offering goods which are made of poorer materials or of poorer workmanship, at the established prices.

A serious problem was created by the fact that monetary inflation was going on simultaneously with the efforts at price control. This placed an ever increasing flow of purchasing power in the hands of the consuming public at the very time when the flow of civilian goods was restricted by war requirements. The volume of purchasing power was more than could be used up in the purchase of these goods at the price ceilings established. This left a large "inflationary gap" in the hands of the buying public that was not matched by a corresponding volume of goods. Efforts to spend this money created a terrific pressure for evasion of the price ceilings, and led to the establishment of numerous black markets.

Finally, although basic wage rates were frozen, "take-home" wages were not, because the workers were able to increase their earnings by overtime hours of work and extra pay for this overtime. This tended to attract work-

ers away from establishments producing peace goods into war industries, where high earnings could be obtained. The holding down of wages in peace industries tended to distort the allocation of labor, thus preventing the price system from performing its function of directing labor according to the demand for it. This necessitated the setting up of a War Manpower Commission to exercise control over the shifting of labor.

A serious problem was created by the fact that some commodity prices were held rigid while others were not, and that some wages were limited while others were free to move. This permitted price disparities to develop that put a considerable strain on the ceiling structure. The higher earnings of workers in certain industries made it difficult for other employers to secure workers. This and other factors, such as the necessity of employing less efficient labor, increased production costs pretty generally. The price ceilings were bound to give way when costs rose to the point where profitable operation was no longer possible for enterprisers. The price-fixing authorities had the power to make adjustments to meet such circumstances, but this power was not always wisely exercised. Disparities were aggravated by the fact that some prices would be adjusted without sufficient regard for their repercussions on other prices. For instance, in the postwar period, ceiling prices were removed from heavy cream and ice cream, but the price of butter was not permitted to advance. As a result, production of butter was sharply reduced by creameries who turned their cream into the more profitable products. A serious butter shortage resulted.

The criticism that the pegging of prices to their positions on a given date prevented them from being kept in line with their changing normals is fundamental. It directly challenges the basic principle on which the price control program was based. The weakness arising out of the fact that monetary inflation was going on at the same time as price freezing was also a serious one. It was practically inevitable that sooner or later this excess purchasing power would find its way into commodity markets, where it would be bound to raise some prices. The other weaknesses created administrative problems, but were not so basic; that is, the program conceivably could have been handled in a way to reduce them to a minimum.

Considering the disturbed conditions of the war, and the speed with which the program had to be put into effect, it was handled fairly well. It worked much better than many economists had thought possible, and the rise in prices that took place during the war was very moderate.

Following the war, the various weaknesses that had been building up an accumulated pressure began to take effect. At the same time, the price-fixing authorities relaxed control in many places while trying to hold them firmly in others. They were compelled to do this because of congressional pressure, which threatened to abolish the whole price-fixing program. As a result, disparities in the price structure were greatly aggravated. To make

matters worse, numerous strikes induced the administration to grant substantial wage increases to important groups of workers. These wage increases raised production costs, so that the OPA was forced to allow compensating price increases in basic products, such as those of the iron and steel industry. So, little by little, various breaches in the price ceilings appeared until, eventually, it became apparent that the program was collapsing. It was finally abandoned late in 1946, except for house rents and sugar, which were virtually decontrolled in 1947. Notwithstanding this collapse, the price ceiling program must be judged to have served a useful purpose during the war, and to have been justified by its results.

Differential Pricing.—The broad scheme of ceiling pricing reviewed above was subject to two very important exceptions: (1) where military goods were purchased by the government; and (2) where price relief was granted to firms whose output was deemed essential, but which were unable to operate without loss at the established ceilings.[4] For these two categories a system of special prices for individual firms was used, thereby establishing a system of *differential* rather than *uniform* prices.

The ceiling technique was not well suited for the purchase of military goods by the government because many of these were complex products, such as tanks, ships, and airplanes, which could have no standard prices as they were new products constructed to detailed specifications. Of course, the government also purchased standardized goods, but its demand for these products called for them in quantities so much greater than usual that special cost conditions were created which seemed to require special price arrangements. It should be frankly stated, however, that one primary reason for this different treatment of government purchases was the desire of the military authorities to be completely free of restraint from outside agencies. The reason given for this demand for freedom was that the urgency of attaining a high rate of production far exceeded in importance the OPA goal of equitable and efficient pricing. The military argued, with good reason, that if firms made excess profits, these could be recaptured by the excess profits tax and by the provision, contained in all contracts, that prices could be reviewed and new prices negotiated after the transaction was completed and delivery made.

The use of differential pricing in so-called relief cases became the major burden of OPA's work as the war progressed. It involved very important theoretical, as well as practical, problems. Suppose a hypothetical Thomas Metals Products Company, manufacturers of parts used in trucks and certain industrial machinery, found that rising costs of labor and materials had

[4] Only the final products purchased by the military forces were exempt from price control. Component elements that entered into the process of production—such as steel plates for ships, castings, and pipe used in manufacture of the final product—were under regular price control, even if the entire final product was destined for military use.

reached a point where the firm faced a loss from its operations. Assume that the War Production Board had certified that the products of this company were essential to the war effort, and that the company filed a request for relief in the form of a price increase. If the OPA recognized the claim to be justified, an order was issued authorizing a higher price, either for all the products of that company or for a few selected items considered to be the real cause of the company's troubles. The company may have requested an increase on only one or a few special items in its list of products. In just this manner an extremely large number of industrial firms received individually set prices for their products. With the passage of time, the number of such price orders accumulated rapidly, until it became a common experience for buyers of a given product to encounter a wide variation in prices. Firms across the street from each other might have very different prices for the identical product.

The student may wonder how such multiple prices for the same product could function in practice. Why should a buyer purchase from a producer selling at high prices when other producers were forced to sell the same product at lower prices? The answer is that, because of acute wartime shortages, every producer could sell all he could produce at prices even higher than the established price, if he had been permitted to do so. Also, since a large part of the output moved under allocation orders and rationing, the distribution of output among buyers was not subject to free competitive purchasing.

Appraisal of the Differential Pricing Plan.—The student is familiar with the law of one price, which states that in a given market, under competitive conditions, if the product of different producers is identical, all must sell at the same price. Since this price must cover the marginal costs of production, it will yield a differential profit to those producers who are able to produce the good at costs which are below the margin. The plan of differential pricing adopted during the war departed from this principle. It was argued that if, in wartime, uniform prices were set for all, price increases sufficient to cover the costs of the least efficient producers would have to be allowed whenever rising costs threatened to curtail production under existing ceilings. It was felt that this would yield needlessly high profits to low-cost producers, and at the same time would increase the inflationary pressure on prices generally. If individual prices could be negotiated for each producer based on his own costs, high prices need be paid only to the marginal firms, and the average prices paid by both the government and the buying public would be much lower. Inflationary pressure on the price level would be correspondingly reduced. At the same time the excessive differential profits that would accrue to low-cost firms on the uniform pricing principle would be eliminated, or greatly lessened.

This raises an interesting problem of theory. Does the extra profit that

accrues to sellers who are in a position of differential advantage perform any useful function? Does it contribute to social economy? If so, a loss to the community will result if it is eliminated. In analyzing this problem, we must distinguish permanent differentials, such as those giving rise to rents on superior lands, from temporary differentials arising out of the deviations of prices from their normal positions. The pure profits of enterprisers are differentials of the latter kind.

Consider first the case of superior land. A rent is paid for any piece of land, not so much because it is different as because this land, with its peculiar qualities, is scarce in relation to the demand for it. The rental price is determined by competitive bidding among opposing demands, on the principle of opportunity costs, and the price is higher for better lands than for marginal ones, either because the former are more fertile, or because they are adapted to products that are more valuable.[5] The pricing of lands in this way promotes economy by making it a losing proposition to use land for any other purpose than that for which its products are most valuable. This being the case, the rents perform a useful function. The attainment of social economy requires that each plot be valued at its particular worth, its rents being included in calculating the cost of the goods produced upon it.

The case of differential profits occasioned by a temporary rise of prices above their normals has some elements in common with that of land, but in other respects it is different. The prices rise because an increase in demand has made the goods in question relatively scarce for the time being, and the facilities for producing the goods become correspondingly more valuable. Since enterprisers control these facilities, they are in a strategic position where they can put a considerable portion of this increased value into their own pockets. The pure profits thus arising perform the useful function of stimulating production, causing more resources to be employed in the affected industries and tending to reduce the scarcity. Until such time as the capacity of the industry can be increased (it may be a long time in some cases), the prices must remain as high as marginal costs, with the result that profits will continue on those increments of the supply that are produced at lower costs. This equality of prices with marginal costs also performs the useful function of assuring that such facilities as are already available will be utilized as far as they economically can be (and no further) as long as the shortage continues. With the law of one price prevailing, it is not possible to sell the increments of supply that are produced at less than marginal costs at a lower price than those produced at the margin, and even if this could be done, the resulting reduction in profits would reduce the incentive to expand facilities, and so delay the reaching of the more

[5] Even the poorest lands will command some rent if they are scarce in relation to the demand for them.

economical position where capacity would catch up with demand and prices would fall to optimum costs. Besides, a high price for each unit of goods sold checks the demand, restricting the commodity to those uses which will justify the high costs occasioned by it. This, again, promotes economy.

During a war, however, the case is somewhat different. Shortages of some commodities become very acute, and available capacity may be worked so hard that marginal costs will be extraordinarily high. If all the increments of output purchased by the government were paid for at the level of these high costs, differential profits would be excessive. They would be more than were necessary to promote the needed increase in current production, and yet, they would not bring about a sufficient increase in capacity, because producers would realize that the increased demand was only temporary. Neither would they serve to check demand on the part of the government, because it would buy what it felt necessary for successful prosecution of the war, regardless of the cost. Under these circumstances, it is not only unnecessary, it is socially wasteful to permit producers to pocket all the difference between marginal and inframarginal costs. Thus the policy of making purchases at different prices according to the costs of each particular producer appears to be justified. In applying this policy, however, it would be wise to retain some inducement to efficiency, by allowing a wider margin of profit to those producers whose costs are kept down by superior management than to those whose costs are higher.

Wartime Control of Production and Consumption. Rationing.—Since the exigencies of modern warfare put too great a strain on the price system for it to direct the needed conversion of industry from peace goods to war goods, various direct controls over production and consumption have to be set up. Such controls are made even more necessary by the fact that the freezing of prices prevents them from functioning to balance supply and demand. This is seen most clearly in the case of retail prices. Ordinarily, if there is a shortage of any commodity, its market price rises, thereby restricting the effective demand to what the market can supply, and thus maintaining a temporary equilibrium. But when the war creates a shortage of civilian goods, and prices are not allowed to go up, the effective demand will greatly exceed the effective supply, causing confusion in the market unless appropriate measures of control are instituted.

This can be illustrated by the diagram of Figure 10. In that figure the solid lines DD and SS are assumed to represent the short-period demand and supply for canned fruit under normal conditions. The equilibrium price, determined by the intersection of DD and SS, is OP, and the quantity that changes hands is OQ. In wartime, scarcities of cans and of labor reduce the supply and make it more costly, so that a higher price is necessary to call forth the same quantity of goods as before. This is pictured by the new supply curve, S′S′, which has shifted to the left in conformity with

the fact that at each price a smaller quantity will be offered for sale. On the demand side, the effect of higher money incomes, in making consumers willing to buy larger quantities of the fruit at each price, is indicated by the fact that the new demand curve, D'D', has shifted upward and to the right. Without government intervention a new equilibrium would be established between S'S' and D'D', but the price would be significantly

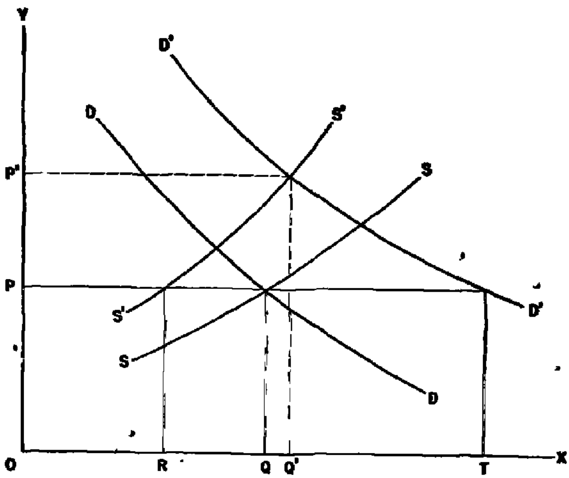

Figure 10. Wartime Disturbance of Price Equilibrium

higher (OP') while the quantity exchanged would increase but little in moving to OQ'. Let us assume that, under these circumstances, considerations of social justice moved the government to intervene and forbid the sale of canned fruit at a price higher than the one which formerly prevailed, OP. The new demand curve informs us that, at the price OP, consumers are willing to purchase the quantity OT, but the new supply curve indicates that sellers would offer only the quantity OR.

Thus, under these conditions, many buyers willing, and even anxious, to purchase the fruit at the price OP are bound to be disappointed. The result is likely to be a run on stores and the formation of queues. The buyers that are successful in buying the fruit are those who happen to reach the shops first, or who can wait in line the longest. Good customers or friends of the distributors may be favored, much to the irritation of others. Perhaps many buyers will obtain fruit at the official price only by bribing the sellers through the purchase of other goods, possibly at

higher prices. Hence, if the chaotic distribution of canned fruit by chance, favoritism, and evasion of the price controls is to be avoided, the task that the price mechanism is no longer allowed to perform will have to be undertaken by the state. In short, wherever the price regulations result in prices so low that effective demand exceeds effective supply, the available supply cannot be rationed out automatically by the price mechanism; therefore, if intolerable injustice and chaos are to be prevented, the government must do it.

It was to prevent these things during the war that a system of rationing was established. By means of it, goods of which there was a shortage were rationed out to consumers equitably, on a basis of need, by giving out coupons which had to be surrendered when the goods were purchased.

In the production of goods, a similar principle was followed, though the machinery was different. Since prices could not be depended upon to pull raw materials away from peace goods to war goods, a system of priorities and allocations was set up under control of the War Production Board. This board had the enormous task of appraising the whole of civilian and military needs and classifying them according to what it deemed to be their order of importance. It thus had to work out, on the basis of its judgment, the guiding of the economic process that in peacetime is performed automatically (if somewhat imperfectly) by the price system. The board was given such power that it could (and did) compel manufacturers to fill first those orders to which it gave priority, and it allocated the available raw materials into the channels that it considered most urgent.

In the field of labor, the guidance of prices was less seriously interfered with. Labor was attracted into war plants very largely by means of wage inducements, mostly in the form of extra pay at higher rates for working overtime and on Sundays. However, some pressure was put on the workers to get into war work by the threat of drafting into the army those who did not do so, and there was some interference with the free movement of labor from one employment to another by the War Manpower Commission.

The Planned Economy of Wartime.—So, during the Second World War, a system of manipulated prices was substituted for the normal tendencies of the price system, and the spontaneous guidance of the market was very largely replaced by governmental direction. It was a system of centralized, authoritative, economic planning.

It was remarkably successful. Under it, production was stepped up to a level of real income far above anything that had ever before been achieved, even in periods of the greatest prosperity. Munitions of war flowed from our industrial plants in enormous volume, making it possible to bring the war to a victorious conclusion. At the same time, civilian needs were adequately met. Although consumers were unable to buy all that they wanted

of some commodities, the average standard of living of the people was probably raised rather than lowered. Most surprising of all, especially to economists, the strong inflationary pressure created by the monetary expansion which resulted from the government's financial program was held fairly well in check by the price ceiling law, so that prices rose only moderately.

SUMMARY

Producers in competitive industries (especially agriculture) sometimes exert pressure for legislation to protect themselves against low prices. The cases of rubber and coffee illustrate the fact that when prices are artifically maintained at profitable figures, an increase in production is stimulated outside the area of price control which tends to force the price down again. Overcapacity in American agriculture has led to various proposals for the control of farm prices in this country. The Federal Farm Board attempted to raise the prices of wheat and cotton by buying surpluses of these commodities, but the plan was abandoned because the board soon accumulated great stocks of these products which it could not sell without heavy loss. Later the Agricultural Adjustment (AAA) program, which still prevails in modified form, was adopted. Its objective is to maintain "parity" between agricultural and nonagricultural prices, based on their ratios from 1909 to 1914. The program includes (1) withdrawing acreage from staple crops for soil conservation purposes, under the inducement of federal "parity payments" for acreage so withdrawn, (2) the fixing of market quotas (by farmers' vote) for crops threatening to depress prices below parity; (3) the "ever-normal granary" idea, of storing surplus crops for later release in years of shortage, financed by federal loans; and (4) the purchase and disposal of surpluses to welfare agencies by the Department of Agriculture. One method used to dispose of surpluses has been the Food Stamp Plan, by which the poor are given surplus foods free along with their purchases of other staple groceries. Although ostensibly a means of improving the nutrition of the poor, it is primarily a device for raising farm prices by the withdrawal of surpluses from the market.

The following principles are applicable to all price-raising devices. (1) Temporary curtailment of output (without correction of overcapacity) is sometimes justifiable in an emergency but should not be continued indefinitely. (2) The prices aimed at in measures of control should be equal to optimum costs, they should not be based on the prices prevailing in some chosen base period. (3) An industry should not be supported indefinitely by government subsidies, but should pay its own way. (4) Attempts to correct overproduction by withholding surpluses, thereby raising prices, are likely to aggravate the trouble by encouraging more production. (5) The true remedy for overcapacity is to withdraw labor and capital from

the affected industries. (6) Storage of occasional surpluses for later release in years of shortage is justified, but there is a danger that the device will be abused to protect the industry from the penalties of overcapacity.

Modern warfare disturbs prices drastically by creating extraordinary demand for certain commodities and by inflationary financing which tends to drive all prices up sharply. In the Second World War our government sought to curb these disturbances by the so-called "price ceiling" plan, which fixed a large part of the price structure at its established pattern as of certain base dates. There were various difficulties, especially those caused by the fact that some prices were fixed while others were not, and by increases in production costs which necessitated raising some prices; but the program worked fairly well in the emergency, so that prices rose only moderately. After the war, various weaknesses in the program, and the granting of wage increases, forced its early abandonment. In the purchase of military goods by the government, and in essential industries where some firms could not produce without loss at the established ceilings; prices were based on the cost of the individual producer in each case. This would not be good economy in peacetime, but is justified in wartime because if prices were uniform for all, they would have to cover very high marginal costs, yielding excessive profits to low-cost producers, without checking demand or stimulating a commensurate increase in output.

When prices are fixed below the points to which they would go in a free market, effective demand exceeds effective supply. This necessitated a program of rationing during the war to effect an equitable distribution of the supplies of scarce commodities among consumers. Similarly, in the production of goods, raw materials had to be directed toward their most important uses by a system of priorities and allocations. Labor was attracted into war plants chiefly by wage inducements, with some restrictions on free movement under the direction of a War Manpower Commission. So, the wartime system was one of centralized, authoritative, general economic planning.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

Good discussions of the various schemes for controlling the production and prices of agricultural and other basic commodities are contained in B J Wallace and L M. Edminster, *International Control of Raw Materials* (1930), J. E Dalton, *Sugar, A Case Study of Government Control* (1937), and J. W. F. Rowe, *Markets and Men* (1936). Some very thoughtful and provocative discussions of the difficulties inherent in the control of competitive prices, presumably from the pen of George E Roberts, have appeared from time to time in the Monthly Letters of the National City Bank of New York An excellent presentation of his point of view, with particular reference to farm prices, is to be found in a pamphlet by him, entitled *The Fallacy of Price Fixing*, published by the National City Bank in 1924.

Special studies of rubber and coffee are: C. R. Whittlesey, *Government Control of Crude Rubber: The Stevenson Plan* (1931); and V. D. Wickizer, *The World Coffee Economy, with Special Reference to Control Schemes* (1943). A more general treatise is Jules Backman's *Government Price Fixing* (1938).

On wartime price controls the following may be cited: Charles O. Hardy, *Wartime Control of Prices* (1940); John Maurice Clark, *Demobilization of Wartime Economic Controls* (1944); A. C. Pigou, *The Political Economy of War* (revised edition, 1940); Seymour E. Harris, *Price and Related Controls* (1945); and J. Hirsch, *Price Control in War Economy* (1943). The Harris book is especially good because of his experience in the training of new employees for the OPA during the Second World War.

Our analysis of competitive price controls, and of differential pricing, is based partly on the manuscript of Raymond T. Bye's forthcoming book, *Social Economy and the Price System.* A portion of our discussion of wartime rationing is taken from a pamphlet by Raymond T. Bye and Irving B. Kravis, entitled *Economic Problems of War* (1942).

G. S. Shepherd's *Agricultural Price Policy* (1947) reviews and analyzes American experience with agricultural price controls, setting forth the program that the author considers desirable.

PART VII

THE DIFFUSION OF INCOME

CHAPTER XXI

The Problem of Inequality

A. The Facts as to Inequality

Attacks on the Present Division of Income.—Probably no phase of our economic organization has been subject to more bitter attack than the sharing of income. Under the capitalistic system the fruits of industry are very unequally divided. Some people are rich and others are poor. There is a great contrast in the economic well being of different classes in society. It is alleged that this inequality is very unjust, and this creates a great deal of discontent and radicalism. Most of the agitators who seek to bring about sweeping reforms of our economic order are more concerned with the defects in the distribution of income than with those in its production, and their suggestions for change are largely directed at correcting the principles by which the social income is apportioned. In this and the next two chapters we shall turn our attention to this question. We shall do so, however, not by indulging in the hasty, sweeping generalizations of the agitator, but by a careful analysis of all the issues involved. We must first find out what are the actual facts about the present distribution of income.

The Division of Incomes Among Families in the United States.—A careful estimate of the distribution of family incomes in this country in 1929 (and also of the incomes of individuals living outside of family groups) was made by the Brookings Institution[1] A similar estimate was made by the National Resources Committee for the period 1935-1936.[2] More recently, the Research Division of the Office of Price Administration prepared an analysis of incomes for 1943[3] The figures for all three of these studies are summarized on the next page They represent incomes received before the payment of taxes Family incomes are given rather than those of separate individuals because the family is our typical spending unit

The situation shown is a serious one that gives real food for thought Notice that, while a few are enjoying great riches, the great majority are relatively poor In 1935-1936 there were about 5,000 families who

[1] M Leven, H G Moulton, and C Warburton *America's Capacity to Consume* (1934)

[2] National Resources Committee, *Consumer Incomes in the United States* (1938)

[3] Office of Price Administration, Division of Research, "Distribution of Civilian Income, 1942 43," cited in the *Economic Almanac* for 1945 46 of the National Industrial Conference Board, p 81

had incomes of $100,000 or more. This means fabulous luxury for these favored children of fortune—luxury beyond the wildest dreams of fairy tales. But the numbers of the rich are small. Only about 300,000 families (1 per cent of the total) had incomes in excess of $10,000, and only about 700,000 families (2.5 per cent) had more than $5,000. On the other hand, nearly 26 million families (88 per cent) had incomes of less than $2,500, while over 12 million (42 per cent) had less than $1,000 each. These people at the lower end of the economic ladder were in poverty, scarcely able to provide the necessities of life, and forced to eke out a sordid and miserable existence. The latest estimate indicates that many families improved their economic status between 1936 and 1943. Only 14.8 per cent of all families

SUMMARY OF THE DIVISION OF INCOMES AMONG FAMILIES IN 1929, 1935-1936, AND 1943

	1929		1935-1936		1943	
Income Class	*Percentage of total Income*	*Percentage of Families*	*Percentage of total Income*	*Percentage of Families*	*Percentage of total Income*	*Percentage of Families*
Under $ 500	1.5	7.7	2.7	14.2	.4	4.6
$500– 1,000	3.7	13.8	12.8	27.5	2.2	10.2
1,000– 1,500	9.3	20.9	17.3	22.9	3.9	11.6
1,500– 2,000	10.5	17.1	15.2	14.4	5.7	11.7
2,000– 3,000	16.3	18.9	19.0	12.9	15.2	21.4
3,000– 5,000	17.9	13.4	12.1	5.4	26.2	23.7
5,000– 10,000	14.0	5.9	7.4	1.7	26.2	13.9
10,000– 25,000	8.8	1.7	6.9	.8	19.6[4]	3.5[4]
25,000– 50,000	4.2	.4	3.2	.15	—	—
50,000–100,000	3.3	.16	1.6	.04	—	—
100,000 and over	11.2	.09	1.9	.01	—	—
	100.0	100.0	100.0	100.0	100.0	100.0

had less than $1,000 in the latter year; 49.1 per cent had less than $2,500, while 17.4 per cent had incomes in excess of $5,000. This improvement was, of course, the result of wartime prosperity with its sharp increase in money wages, profits, and other forms of income. It is conceivable, therefore, that it will prove to be a temporary phenomenon. However, in spite of the larger money incomes received by many families in 1943, there was still a marked inequality in the division of the total national income.

A good way to visualize the extent of this inequality is by means of the Lorenz curve illustrated in Figure 11. This shows the percentage of the total income received by different percentages of the population. The dotted

[4] Incomes of $10,000 and over.

straight line across the center of the square shows how the curve would look if our income were equally distributed. Thus, if each family received an equal share, 10 per cent of the people would get 10 per cent of the income, 20 per cent would receive 20 per cent of the income, and so on. The curved lines show the actual distribution of incomes for the years 1929 and 1943. The extent to which these curves depart from the dotted straight line indi-

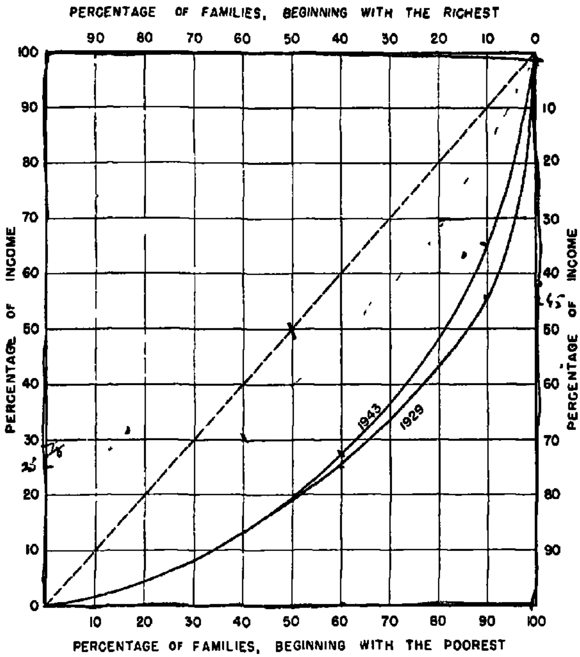

Figure 11. Percentage Division of Income Among Families in the United States.

cates the deviation of distribution from perfect equality. It is to be noted that this deviation was greater in 1929, a fact which probably indicates that inequality becomes more extreme in periods of rapidly increasing prosperity (1929 was a boom year). The 1929 curve shows that the richest 10 per cent of our people received about 45 per cent of the income in that year, while the poorest 60 per cent got barely 25 per cent of the total. The situation was only somewhat less extreme during the prosperous year of 1943, with the poorest 60 per cent receiving approximately 28 per cent of the national in-

come, while the richest 10 per cent received about 30 per cent of the total.

More Production versus Greater Equality.—Some writers have held that it is useless to consider the problem of inequality until we have increased our production much beyond the point where it now is. The total income of our country is so small, in their opinion, that, if it were distributed with substantial equality among the population, everyone would be in poverty, or near it. The whole of the surplus of our fabulously rich millionaires would not go very far, it is claimed, when divided among the millions of poorer persons who would have to share it. Therefore, if we could get the surplus away from the rich and divide it among the poor, instead of raising all to a plane of prosperous living it would reduce the nation to a dead level of mediocrity. Hence, the real remedy for low incomes is ever-increasing production, and not any change in the present system of income sharing.

It is, of course, desirable to do all we can to increase our production. But the above argument is not convincing; for, even if production were increased to the point where the poorest were able to live at a level of modest comfort, the contrast between their position and that of the richest might still cause dissatisfaction and raise grave doubts about the justice and desirability of the distribution. Moreover, in years of prosperity we have already attained a state where there is a social surplus—a national income adequate to maintain all of our people above the poverty line; yet poverty has not been eliminated. It is entirely appropriate, therefore, that society should now seek to develop means whereby a fair share of this surplus can be as widely diffused as possible among the population.

How much is needed to support our population at a comfortable standard of living? The marked increase in the cost of living makes it necessary to revise prewar estimates, which suggested that the average family of five could be supported at a level of comparative comfort on $2,000 a year. Statistics compiled by the United States Bureau of Labor Statistics indicate that the cost of living in 1945 had risen approximately 30 per cent over the 1939 level, so that the average family would have required about $2,600 in order to maintain the same standard of living as it did on $2,000 before the war. We may assume, therefore, that an income of $2,600 was sufficient for relative comfort in 1945. Since we had about 36 million families, an income of about 93.5 billions would have been sufficient for their support. Some eight million individuals living outside of family groups would probably have needed $1,300 each for a comfort standard, making an additional requirement of 10.4 billions. This comes to a grand total of 104 billion dollars. Our national income in 1945 was about 160 billions. It was, therefore, more than sufficient to enable all our people to live in comparative comfort. While it is doubtful, in spite of optimistic estimates, whether we can maintain steadily an income of this size, it is reasonable to suppose that with relatively full employment we might enjoy a national income of 100 billions, at 1945

prices. There is no doubt that our tremendous productive capacity, if fully utilized, can meet our consumption requirements. We may therefore conclude that a more even division of income could in prosperous years give a comfortable living to all our people.[5] However, in years of severe depression the national output might not be sufficient to provide a comfort standard for everybody. Therefore we cannot hope to meet fully the problem of poverty until we have learned to control economic fluctuations.

Let it not be assumed, however, that the problem of inequality is identical with the problem of poverty. Poverty is not always the result of inadequate income. It may be due to unintelligent consumption—ignorance of how to use what income one has. Moreover, if poverty were eliminated, there might still be a great deal of inequality. Even though no one was actually poor, some might be poor by comparison with the very rich, and there might still be much dissatisfaction. Our concern is with inequality as such, and with poverty only in so far as it is the result of unequal distribution.

B. Ethical Aspects of Inequality

Is Inequality Just?—The preceding discussion tacitly implies that the existence of extreme inequality is undesirable, but this should not be assumed without careful thought. Let us look into this question.

To many persons, inequality of incomes seems perfectly natural and right. No two individuals in the world are alike in physical appearance or mental peculiarities. We are unequal in strength, in intelligence, in tastes, and in talents. May we not conclude, therefore, that inequality is part of the plan of nature, and that differences in the incomes of different persons are as much to be expected as differences of any other kind?

The mere fact that a thing is natural does not prove that it is to be desired. The whole history of human progress is one of improving on the ways of nature. Moreover, it is difficult to justify differences in incomes by appealing to innate differences in human nature. The fact that human beings are unlike does not prove that they deserve unequal rewards. There may be differences in ability, but if one person has more talent or productive

[5] It must be remembered that prices are merely the money measure of the various goods and services in our markets. If the national income were more evenly distributed than it now is, the demands for goods would be very different from what they now are, and the channels of production would be correspondingly changed. Hence it is not entirely accurate to argue that a redistribution of income would raise the standard of life exactly in proportion to the greater equality of income. In fact, we might expect that less would be produced of the articles now consumed by the very rich (because there would be less demand for them) and more would be produced of those things used by persons of moderate incomes. Just how this would affect their relative prices depends on the conditions which govern their production. Notwithstanding these considerations, the figures we have adduced suffice to maintain the general thesis, that our production would be sufficient to keep all of our people well above the poverty line if it were more evenly distributed.

power than another, he cannot claim personal credit for that superiority. His talent is the result of inborn gifts or of favorable environment, for neither of which he was responsible. He has simply been more fortunate that his fellows. A human being is the product of numberless forces acting upon him. Some operate before his birth, and their results are innate in his very being; others come from home, family, friends, teachers, and general surroundings. In both cases they come from outside himself. One individual is favored with good heredity, refined home influences, a splendid education He succeeds. Another may be born of weak stock and reared in a home of low moral character, with no place to play in but the gutter and no playmates but the hoodlums of the slums. He is taken out of school at the earliest age which the law permits. He fails. Can the one be said to deserve his success and the other equally to deserve his failure? Rather it must be confessed that each is simply the product of society. The wealth of the successful man was made possible by parents, teachers, writers, and various other external influences. The poverty of the other was the result of influences of a more unfavorable nature Both lives were directed by forces largely social in their nature. The rich man may, then, be said to owe something to society for his success, and society to owe something to the poor man for his failure.

Interesting as it may be to speculate upon such questions of abstract justice, it is not wise to determine a social policy upon such grounds alone We must follow a more pragmatic method. The really important thing is to ascertain the effects of equality and inequality upon society. Knowing such effects, we may then be able to decide which is the more conducive to social welfare With this end in view, let us pursue our analysis further.

Diffusion of Income Essential to Economic Welfare.—In the opening chapter of this work we laid down a number of essentials for economic welfare. One of these was an income sufficient to provide a comfortable standard of living for the people. Another was the wide diffusion of that income among the members of society. We have just learned that the United States today meets the first of these standards. Our income is adequate for the comfort of our people; but the facts of inequality show it to be so unequally divided that many of them, in fact, are not enjoying comfort. Here, then, is one evil result of unequal distribution—poverty, with all its attendant suffering and disaster. A greater diffusion of our income can only be brought about by measures tending to distribute it more evenly.

Inequality and the Guidance of Production.—In Chapter XIX we had occasion to analyze the functions performed by the price system in modern society. We noted that prices would direct production into the channels where they would best satisfy the desires of consumers were it not for one obstacle That obstacle was the inequality of incomes. Under the price

system production follows demand, and demand is made up of desire backed by purchasing power. Consumers' desires are effective in the market only in so far as they are supported by money income. Those consumers whose incomes are great can cause production to respond to their most trivial wants. Those consumers who are poor may be unable to get society to produce even for their most urgent needs. As a result, we make luxuries for some while we deny necessities to others. If the goal of economic welfare is maximum satisfaction of the wants of all, and not merely of a favored few, this situation is wrong; and if we regard consumers as human beings whose wants are equally valid, then it is wasteful to cater to the unimportant desires of some while ignoring the very pressing needs of others. The price system, therefore, can never be really satisfactory and economical until a greater measure of equality is achieved.

Economic Wastes of Inequality.—The extreme inequality which prevails in modern society is economically wasteful. There is waste at both ends of the social ladder. On the one hand, the surplus incomes of the rich are responsible for much idleness, dissipation, unhappiness, and demoralization. Many persons of great wealth—especially women—spend much time in the extravagant leisure of clubs, parties, resorts, travel, and the like, consuming without producing. Thousands of laborers and many valuable resources are employed in providing them with luxuries of little real worth, dissipating the social product to useless ends. Often this wealth weakens the characters of its recipients, especially the second and third generations who had no hand in making it. Not all people of means are extravagant spenders, and many, perhaps most of them, are useful producers, but it can hardly be denied that among the very rich there is much waste of the sort described.

The influence of poverty, on the other hand, is no less disastrous. Undernourished, poorly clothed, improperly housed workmen cannot be efficient. Out of poverty grows disease, dissipation, vice, and crime. Here again is loss of productive power. If everyone received sufficient income to maintain himself in health and comfort, the vitality and morale of the working classes would be enormously improved, with consequent increase in their productive capacity.

There is waste, too, in the social discontent that springs from inequality. Extremes of wealth and poverty make possible the agitation of radicals and the resulting dissatisfaction of the masses. Strikes and other forms of social disorder are partly the result of this situation. A society, none of whose members were really poor and none extravagantly rich, might prove to be one of more contented, wholesome, and vigorous people, whose production would be at a maximum level and all of whose really legitimate wants would be amply provided for.

Inequality and the Law of Diminishing Utility.—A strong argument against the inequality of incomes can be derived from the law of diminish-

ing utility. This law states that, as an individual consumes increasing units of any good, the amount of utility derived from each additional unit decreases. Now this principle is true not only of a particular good but of one's income taken as a whole. As our income increases beyond a certain point, the extra enjoyment derived from each addition to it grows smaller. It is not likely, for instance, that a man with a million dollars yearly income gets five hundred times as much enjoyment from it as a man who receives only two thousand dollars. Some economists express this idea by saying that the law of diminishing utility applies to money. Accordingly, increments of income in excess of a certain amount, say $2,000, will tend to yield progressively decreasing satisfactions to their recipients, while increments up to $2,000 will perhaps yield increasing enjoyments to those who receive them. It follows that if the total national income could be divided in such a manner as to reduce the incomes of the very rich and increase the incomes of the very poor, the loss to the wealthy would more than be made up by the greater enjoyments of the poor, and the net psychic income or real satisfactions of society would be increased.

One cannot carry this reasoning, however, to the conclusion that perfect equality of incomes is the most desirable condition of distribution. Perfect equality would not lead to maximum satisfactions, because human beings are not all alike. They do not have the same needs, the same tastes, nor the same capacities for enjoyment. The person of artistic temperament craves artistic surroundings, and esthetic pleasures such as music, painting, and the like. A person of more common clay may be contented with much simpler and more easily obtainable enjoyments. So infinite is the variety of personal characteristics and needs that it cannot be said that a mathematical equalization of incomes would produce the maximum social well-being.

Inequality as an Incentive to Production.—Moreover, there is another and perhaps stronger argument against the maintenance of perfect equality. The inequality which now exists is one of the principal devices upon which we rely for securing efficiency in production. It is the desire for riches that is the principal motive to industrial achievement. Men strive not so much for wealth itself as for the recognition and superiority over their fellows which it brings. Although one can acquire riches in unproductive ways, it is also true that many of the conspicuous productive achievements of our civilization have been made under the stimulus of this powerful incentive. Businessmen are induced to organize their plants efficiently, to keep their costs low, to improve their productive technique, to find new commodities with which to appeal to consumers—all in response to the desire for pecuniary gain. The influence of this motive is not confined to the leaders of business, but permeates the rank and file of labor. Each workman knows that his income depends upon his productive efficiency, and that if he can become more skilled and more competent than his fellows, he can raise his

income above theirs. The desire to rise is always driving him on to better his accomplishments. If we reduce all incomes to the same level, we will lose the force of this incentive.

Of course, production is not the only goal of economic activity. A nation with a moderate income, widely diffused, might be more prosperous than one with a much larger income, so concentrated in the hands of a favored class that the masses of the people were in poverty. Hence, some loss in productivity might be tolerated, if by that means we could obtain some increase in the incomes of the poorer classes. But the economic surplus of this country is not large enough to permit very much reduction in the total output of industry. A serious loss in productivity would plunge the whole nation into poverty, and this would be too great a price to pay for the purchase of equality. It is better that a few should be well off than that all should be poor. This consideration gives force to the argument against any program for the attainment of *perfect* equality.

Unequal Incomes Play a Useful Role in the Economic Process.—The above argument in favor of some inequality of incomes is further supported by the fact that the present system of income division, involving some differences of incomes, performs a useful function in promoting economy in our industrial organization. These functions will presently be explained,[6] but they should be mentioned here as having a bearing upon the general problem.

A Reasonable Policy.—We are now in a position to bring together the threads of our argument and arrive at a conclusion. We have seen that, although the income of the United States is more than adequate for the comfort of everybody, it is so unequally distributed that a large proportion of our population is in poverty. We have seen, too, that such inequality is hard to justify on ethical grounds, that it results in a considerable amount of productive waste, and that it dissipates economic goods in the satisfaction of trivial wants. On the other hand, we have seen that perfect equality might be disastrous. A reasonable policy, therefore, would be to seek a golden mean in this, as in other things. Not the complete equalization of incomes, but a reduction in the amount of inequality that now prevails, should be our goal. Let us therefore consider the present process of income sharing, with a view to ascertaining what changes in it we may hope to effect with some prospect of success.

C. Standards of Income Sharing Policy

The Present Process of Income Sharing.—Under the process of income sharing now prevailing, the income of a community is paid in the first instance to those persons who own or control some fundamental productive agent. Whoever is in a position to supply savings, land, labor, or manage-

[6] See below, p. 493.

ment can claim a share of the industrial product. The four primary shares in the division of income are, accordingly, the interest on invested savings, the rent of land, the wages of labor, and the profits of business enterprise. All of the product of industry is paid out in these forms, and no one who has not contributed one of these productive agents can obtain any of it except through transfer from those who have so contributed.

How much is paid for the use of any of these agents is determined by competitive price bidding. According to the current theory, the price established for invested savings, land, or labor is determined by the value of that agent's marginal contribution to product. This involves the principle of diminishing productivity, which is as follows: In any productive operation in which a number of productive agents are employed, increasing any one of those agents relative to the others will, after a certain point has been reached, yield less than proportionate increases in product. It follows from this principle that those agents which are most abundant are worth the least, because their marginal productivity is low. Every agent of production has important uses, but if its supply is very large, some of it must be employed in less important ways. The available supply of such an agent will not be fully utilized until its price has fallen to what it is worth in those least important, or marginal, uses. For example, a certain amount of unskilled labor is indispensable in industry, and, were it very scarce, such labor might command high wages, because employers would be willing to offer high prices in competition with one another to secure it. But if such labor is very plentiful, it cannot all be employed in these indispensable occupations. Some of it must be utilized in tasks of less necessity. Employers will not find it worth while to hire it for these trivial uses until the wage has fallen low. The result is that the large supply of such labor brings the wages down to the value of its product in these marginal employments. The same principle applies to land and equipment. The correspondence of distributive shares with the value of the marginal product, however, is only approximate. Considerable deviations from it occur from time to time.

The share of business enterprisers is determined in a different way. There is some tendency for them to get a return for their investment and their labor of management corresponding to prevailing rates of interest and wages. But it is a tendency interrupted by the peculiar position which the business enterpriser holds as a risk-taker. As the head of a business producing in anticipation of future sales, he must pay prevailing rates for his hired labor and borrowed capital, taking his chances on getting a price later that will yield some surplus for himself. His profits are, therefore, in the nature of a residual share, fluctuating widely with changes in market conditions; and there is often a loss instead of a gain.

This exceedingly brief account indicates that the relative scarcity of different kinds of labor and capital determines the rewards which laborers and

capitalists receive, while the amount of profits accorded to enterprisers is subject to great variation caused by the dynamic changes of industry. Since some agents are much more scarce than others, in relation to the need for them, the amounts paid for their use vary from high to low. So we have great differences in wages, in the rates of interest yielded by different investments, in the returns of different sorts of land, and in the profits of business enterprisers. That is how inequality arises

Functions Performed by the Process of Income Sharing.—This process of income sharing plays an important part in the economy of the present economic organization. It is part of that general price system whose role was explained and defended in Chapter XIX. In fact, the shares of income are simply the prices of productive agents which, as costs, play a part in the fixing of commodity prices. In particular, payment for the use of productive agents on the principle just outlined performs three useful functions:

(1) By having high prices for those agents which are scarce and low prices for those which are plentiful there is provided an inducement to increase the supply of scarce agents, while the increase of those which are already too abundant is discouraged. If there is a dearth of electricians at a time when there is an excess of glass-blowers, the high wages of the former and the low wages of the latter stimulate young men to become electrical apprentices and put pressure on glass-blowers to learn some other trade. If capital in undeveloped regions is scarce, a high rate of interest will be paid for it, thereby encouraging capitalists to invest their surplus funds there. Even land will be increased in supply to some extent under the stimulus of high rents, through the drainage of swamps or the irrigation of deserts.

(2) The setting of prices according to the scarcity of productive agents also promotes economy in their use We are usually most careful of those things which are most expensive. Businessmen are likely to watch with care the capital and labor which is most costly, thereby avoiding waste. The most important aspect of this is found in the principle of substitution. It is often possible to perform the same operation in industry by different combinations of productive agents. One may move heavy materials by men with wheelbarrows, representing little capital and much labor, or by cranes and mechanical conveyors, representing much capital and little labor. If capital is very scarce, social economy would dictate that it be done with labor. If labor is scarce and capital abundant, the other method should be used. The pricing of agents according to their scarcity makes it to the interest of an employer to follow this policy. He tends always to employ that agent which accomplishes the desired work with the least cost A wise manager does not hire a skilled laborer to do work which can be done by an unskilled workman, for by using the latter he can save the difference between their wages. Were it not for this wage difference it would be a matter of no moment to him which type of man he employed, and men of ability might

be withdrawn from important tasks to do work which might easily have been done by a less valuable type of labor. The principle of opportunity costs is a factor in promoting this economy, for it forces each employer to pay for an agent a price as high as that agent might be able to command in its possible alternative employments. This tends to prevent the use of any agent for any purpose less valuable than the other purposes to which it might be devoted.

(3) Finally, the residual nature of profits, fluctuating—as they do—with the dynamic changes of industry, holds up before the enterpriser the possibility of large gains from the efficient conduct of business, and the penalty of losses for inefficiency. As we have seen, it induces him to manage his business with care, keeping his costs low, avoiding wastes, producing the things that find favor in the eyes of consumers, and promoting general productivity.

It must not be supposed that these advantages are attained without some disadvantages We have already seen that the present income sharing process results in inequality and that this in itself is an undesirable condition. It is also true that people are not always paid according to their social importance, that some get wealth without producing, and that fortunes have been made by monopolistic restriction, financial sharp practices, and other antisocial means We shall learn more of these things as we proceed, but we should bear in mind that the income sharing process of the present system does contain certain elements of usefulness which should be recognized in considering any program of reform.

Alternative Systems of Income Sharing.—Collectivists (i.e., socialists and communists) propose to overthrow the present method of apportioning incomes entirely, to substitute for it some system regarded by them as superior. There are several different bases on which payments to individuals might be made. One proposal is to give to each according to his needs. This is a high ideal, perhaps the highest that can be conceived. It would greatly lessen the degree of inequality now existing, but would not result in perfect equality of incomes. Remuneration in accordance with need would strive to give to each individual the amount and kind of income which would provide the fullest possible opportunity for the perfect development of his capacities The man of artistic temperament would receive the means to travel and study the great works of art throughout the world, and to afford that type of esthetic and cultural environment which is necessary to the bringing out of genius The man of mediocre mental capacity, such as the ordinary manual worker, would need to be provided only with sufficient means to afford a comfortable home, a decent amount of leisure and simple recreations In practice, however, it would be impossible to measure the needs of different individuals The attempt to apply this principle in actuality would necessarily result in substantial equality of incomes.

Another possible basis of distribution would be to reward each in accordance with his sacrifice. However, it is impossible to measure accurately the amount of sacrifice that work involves for different persons, or the relative disutilities of different occupations. Moreover, this principle assumes that each individual has equal capacity for employment, which is not true.

Yet another possibility is simply to divide the product of industry equally among all. The undesirability of this has already been exposed.

Any of these principles would lead to a much more nearly equal distribution of income than that to which we are accustomed, and in this respect they might prove advantageous. They would involve so sweeping a change of the whole system of industry, however, that few people are willing to consider them seriously. Inasmuch as they would completely divorce reward from productive efficiency, it is doubtful whether they could succeed. In any case, they could only be applied by the complete abandonment of the price system, and therefore they could not be established under a regime of free enterprise and competition. They could only be realized under a social organization such as socialism or communism. Hence we had better postpone a further discussion of such projects to Chapter XXVIII, which deals with those subjects. We shall find that even most socialists do not regard these suggestions as practicable.

No matter what plan of income apportionment or social organization is established, sound economy requires that the three functions performed by the income sharing process should somehow be accomplished. This establishes a presumption, though not a conclusive one, in favor of the marginal productivity principle. Is it not possible to correct the most flagrant evils of inequality without entirely destroying that principle? A careful analysis may show that we can so modify the present system as to solve our problem, while yet retaining its advantages. This will be our method of approach to the problem. Let us see how far the present arrangements are indispensable, and what modifications can be expected to achieve some measure of success.

Earned and Unearned Incomes.—It has already been hinted that some of the incomes received by individuals in the present system are justifiable, while others are not. We must now endeavor to set up a standard by which we can test their justifiability. Incomes have frequently been classified as earned and unearned, the presumption being that the former are to be defended while the latter are not. These terms, as generally used, are not altogether satisfactory because of their ambiguity. If we are to employ them, we must define them precisely enough to enable us to say with reasonable certainty just when an income is earned and when it is not.

Perhaps most persons would regard that income as earned which is received as the result of one's own exertion and ability, but this is a doubtful test. One may utilize his abilities and exert himself diligently in undesirable ways. This is precisely what the swindler does when he foists an issue of

bogus stock upon thousands of innocent investors. Moreover, it is difficult to defend differences in earnings resulting from differences in ability and perseverance on any abstract principle of ethics. There is no such thing as a self-made man in any real sense. Success comes to those who have been exceptionally well endowed by heredity or who have been especially favored by environment. Failure, likewise, is the result of constitutional weakness or unfortunate surroundings. Even the men who appear to work themselves up from poverty to positions of affluence or prominence in the face of many obstacles must credit their achievement to the unusual qualities of mind and body with which they were favored by birth. The mere possession of superior qualities, therefore, is not in itself a satisfactory justification for exceptional payment.

We must seek a pragmatic standard. In the last analysis that is good or right which leads to desirable results. The payment of income to an individual is justified, therefore, only if it can be shown that it conduces to the social welfare. If the effect of paying high profits to businessmen improves the well-being of the members of society, it is good for us to pay such profits, and not otherwise. We must apply the test of social expediency. If we wish to retain the words earned and unearned as applied to incomes we may do so, provided we use them in this sense: that income is earned which is socially desirable and that one is unearned which is socially undesirable. But this forces us to seek some test of social desirability.

Social Welfare as a Test of Earned Income.—When does an income contribute to the social welfare? One writer[7] has suggested that the enjoyment of any right in society should be contingent upon the performance of some useful function. No one should be given a privilege save for the fulfillment of a duty. This suggests that the enjoyment of income should be associated with the performance of a socially desirable productive service. As things now are many people receive who contribute nothing to industry.[8] Others contribute, but to a product which is in itself undesirable (for example, dope peddling). What social good is accomplished by the payment of income under these conditions? If income were paid only to those who contribute something worth while to production (except for minors and other dependents), each one would be forced to employ himself productively and usefully in order to obtain a livelihood. Thus would we encourage, and in fact compel, the performance of service to the community for the enjoyment of the right to income.

But this in itself is not enough. The amount of income paid for the service should be dependent upon the amount of the service rendered. We cannot measure such services in terms of weight or volume. No scientist has yet given us a yardstick of social welfare. The market where productive

[7] R. H. Tawney, *The Acquisitive Society* (1920).

[8] Proof of this will be given in the following chapter.

agents are hired, however, supplies a pecuniary measurement. If that market is free from monopoly and interference, it fixes the value of productive agents through the collective judgment of business enterprisers as to their usefulness in production. The price which would attach to a service in a free competitive market, therefore, is a good criterion for its valuation. If an individual is paid more than the competitive normal value of the service he renders in production, his income is too high, and if he is being paid less, his income is too low.

Here, then, we have two tests to apply to income. If we desire to use the word *earned* to describe those incomes which we believe conducive to the social welfare, we many define *earned income* as follows: ***That income is earned by its recipient which is paid for a socially desirable productive service rendered by him, at a price not exceeding the competitive normal value of that service.*** It follows that that income is ***unearned*** (1) which is received without the rendering of a corresponding useful service in production, or (2) which is paid for at a rate exceeding its competitive normal value. This standard of earnings accepts the present income-sharing process as sound, in so far as the fixing of prices for productive agents is concerned. Therefore it will lead us to no serious disturbance of the present price system. Our further analysis will show, however, that it suggests important measures which, if adopted, will lead to a considerable reduction of inequality.

Property and Service Incomes.—A distinction may be drawn between those incomes which are derived from the ownership of property and those which are obtained by the performance of labor. These may be designated as property incomes and service incomes, respectively. Critics of capitalism, especially communists and socialists, have frequently attacked all the property incomes as wrong, because they claim they are unearned. Income from labor, on the other hand, they defend as being earned by the laborers. Under socialism, therefore, the private receipt of interest, rent, and pure profits, being property incomes, would not be permitted; only wages, including wages of management, would be allowed.[9] In the next chapter we will analyze each of the shares of income in turn, applying to it the twofold test developed above. We will see that the communist and socialist denunciation of all property incomes and defense of all service incomes breaks down when closely scrutinized. We will find that some property incomes are clearly earned, though many of them are not. On the other hand, we will find unearned elements in wages. The collectivist treatment of this question is therefore inadequate.

[9] Under communism even wages, as we now know them, would eventually disappear, to be replaced by a system of moneyless goods-sharing. See Chapter XXVIII.

SUMMARY

The present unequal division of income has been severely criticized Statistics show conspicuous inequality in the incomes of different individuals and families. A few of the very rich receive a very large share of the total national income, while the masses of the people live at very modest standards, many of them in poverty. The income of the United States today is adequate to maintain our people at a comfortable level of subsistence There is reason to believe, therefore, that a program for the reduction of inequality is feasible.

The desirability of such a program is strengthened by a consideration of the ethical aspects of inequality. Inequality cannot be justified on the ground that human beings are different, for the differences are accidental, not deserved. Inequality is an obstacle to that diffusion of incomes which is essential to economic welfare. It prevents the price system from performing its function of directing production into the channels of maximum need. It interferes with productive efficiency by maintaining an idle leisure class, by dissipating wealth, and by interfering with the health and morale of labor. The law of diminishing utility shows that some gain in satisfaction would result from a greater measure of equality. On the other hand, the role played by unequal incomes in providing an incentive to production suggests that a drastic leveling of incomes would be unwise. A moderate program for the reduction of inequality in therefore advisable.

Moderation is further suggested by considering the present process of income division, which apportions income according to the marginal productivity of the productive agents. This effects economy by encouraging the increase of scarce agents, by discouraging waste in their utilization, and by awarding profits to efficient enterprisers Other proposed systems of income apportionment, such as payment according to need, sacrifice, or perfect equality, offer less promise of success. Not all incomes now received are earned, however. By earned income we mean one received in payment for a socially useful productive service rendered, at a price not exceeding its competitive normal value Unearned incomes should be prevented. We cannot class all incomes derived from property as unearned, and those derived from labor as earned. Each kind of income must be separately analyzed.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

The income studies of the National Bureau of Economic Research provide valuable statistical data on the size and division of the income of this country in recent years This material is contained in *Income in the United States, 1909 1918* (2 vols, 1921), *Income in the Various States, Its Sources and Distribution, 1919, 1920, 1921* (1925), and *The National Income and Its Purchasing Power*

(1930). Volume I of the first named gives its method and findings to 1919 in summary form. For figures from 1850 to 1910 see the useful study of W. I. King, *The Wealth and Income of the People of the United States* (1915). Leven, Moulton, and Warburton's study, *America's Capacity to Consume* (1934) contains a careful estimate of income distribution in the year 1929. Maurice Leven's *The Income Structure of the United States* (1938) presents some significant data on the division of income in this country along occupational, geographical, racial, and class lines. A more recent income study is that by the National Resources Committee, *Consumer Incomes in the United States* (1938), covering the period from July 1935 through June 1936. The latest available study is that of the Research Division of the Office of Price Administration, *Distribution of Civilian Income 1942-43*.

Literature dealing with the ethical aspects of inequality is fragmentary and scattered. Good discussions, somewhat conservative in tone, are to be found in F. M. Taylor, *Principles of Economics* (1921), Chapters XLII–XLV; T. N. Carver, *Essays in Social Justice* (1915), especially Chapter VI; and Hugh Dalton, *Some Aspects of the Inequality of Incomes in Modern Communities* (1920), Part I. For more radical criticisms of the present system of distribution, see Scott Nearing, *Poverty and Riches* (1916); R. H. Tawney, *The Acquisitive Society* (1920); R. H. Tawney, *Equality* (1929); and the literature of socialism cited at the close of Chapter XXVIII.

For a fuller and more popular presentation of the point of view on the problem of inequality and its treatment elaborated in this and the following chapters, see R. T. Bye and R. H. Blodgett, *Getting and Earning* (1937).

CHAPTER XXII

An Examination of the Shares of Income

A. Interest

Attacks on Interest-Taking.—Pursuing the analysis suggested at the close of the last chapter, we shall first consider the share of income paid to capitalists in the form of interest on invested funds. We are not for the moment concerned with the income derived from land, but only with the interest on savings invested in equipment.

The taking of interest for loans has been denounced as improper by one group of critics or another from the earliest times. Today the chief attack comes from collectivists, who denounce this form of income, along with all other revenues derived from property. They argue that labor, working with land, produces all wealth, including the capital equipment from which interest is derived. The capitalist, as such, produces nothing; he merely owns, according to their analysis. Therefore, the laborer should receive the full product of his industry, and if the capitalist deducts interest to put it in his own pocket, he is robbing labor of what is its just due. In a collective society all the capital would be owned by all the people together, through some form of communal or state organization. No interest would be paid to private owners, and all the product would go to the workers. This argument has been made so repeatedly and vehemently, and it is on its surface so plausible, that it must be carefully considered. We can arrive at a correct judgment concerning it if we will analyze the nature and causes of interest.

Why Interest Is Paid.—How does it happen that investors are able to obtain interest for the use of their savings? This query involves two other questions—namely, why are borrowers willing to pay for the use of such savings, and why do they have to pay for them? The answers to these questions should not be difficult for anyone who is conversant with the principles of economics. The chief borrowers of funds are businessmen who desire to secure equipment for use in their businesses. The modern process of production is a roundabout one, in which much labor and material must first be put into instruments and equipment of various kinds before consumers' goods can be created. This equipment can come into existence only through a process of saving. Those who have more current income than is necessary to meet their immediate needs use it to hire labor and purchase materials for the production of factory buildings, machinery, tools, and the like. This

material equipment will then yield consumers' goods at some time in the future. It has been found that this roundabout method of production yields a much larger flow of consumers' goods in the long run than the more direct, noncapitalistic methods of primitive industry. Hence, the use of capital equipment in production yields a surplus not obtainable without it. Borrowers of investible funds, knowing that this surplus will be at their disposal, are able and willing to pay a portion of it to the lenders whose savings make it possible. As an illustration of this, let us suppose that a steam railroad is to be electrified. The conversion requires a great deal of preliminary expenditure for the manufacture of dynamos and overhead wires, the erection of power plants and poles, and the building of new locomotives or cars equipped with the necessary electrical apparatus. When the transformation is complete a great deal more passengers and freight can be transported for a given amount of expense than before. Consequently, the proprietors of the line will be glad to pay a portion of their gains to investors who can lend the necessary funds for the conversion.

A great many borrowers are consumers who desire to obtain possession of equipment for improving their standards of living. They may borrow to build a home, to equip it with labor-saving devices, such as electric refrigerators, washing machines, and vacuum cleaners, or to purchase an automobile. They are willing to pay interest for the use of such equipment in order to have it now instead of waiting until they have been able to save sufficient funds to purchase it outright. If one desires to own his own home, it might be many years before he could accumulate sufficient savings from his income to pay the cost thereof. Old age would be upon him, and he would have very little time left in which to enjoy it. To secure it now and partake of its benefits throughout his lifetime, he is quite willing to pay interest to a lender who will finance the project.

This explanation shows us why borrowers are willing to pay interest, but it does not tell us why they must pay it. They must pay it, under the present system of free enterprise, because the fund of savings through which new capital can come into existence is scarce, and all useful scarce things command a price because of the competition of consumers who bid to secure them. One can save only by doing without consumers' goods. Those who enjoy very large incomes can do this easily, but the number of such persons is not very great. Those with more moderate incomes can save only at some sacrifice to themselves, and the amount which they can accumulate even by such sacrifice is small. As a result, the fund of savings is limited in amount. Hence the use of it commands the payment which we call interest.

The Social Functions of Interest.—The payment of this interest performs important functions in the present system of social economy. In the first place, it serves to regulate the relative amount of productive activity which shall be devoted to future, as distinguished from present, needs. The process

of saving and investment is one of withdrawing resources from use for present consumption in order to provide future income. For example, when funds are invested in the construction of a railway, labor and materials which might have gone into immediately consumable goods are put into the form of equipment whose benefits will not begin until after two or three years of construction, and will not be fully recouped until the passage of a long period of time. It is important that a judicious balance between provision for present and future wants be maintained. If there is too much saving, present enjoyments may be curtailed to the point of actual deprivation, which is poor economy On the other hand, if we consume too much now and fail to provide enough new equipment to increase our enjoyments in the future, productive progress is greatly retarded, and may even be stopped.

The interest rate, which depends on the demand and supply of investible funds, tends to maintain the needed balance. If savings are excessive, interest will fall, and this will make it possible for enterprisers to make investments of relatively low yield that otherwise would not be profitable. So the effective demand is increased. At the same time the low rate reduces the inducement for saving, so that the effective supply shrinks. On the other hand, if savings are deficient, interest rises, demand is checked, and more saving is stimulated But this mechanism is seriously hampered by the unfortunate confusion of banking functions that was described in Chapter XV, and by unwise fiscal policy on the part of our federal government, which artificially depresses the interest rate to keep up the prices of government bonds. Hence the functioning of interest as an instrument for balancing present and future is very unsatisfactory in our economy

The second function of interest is to direct investment into the most valuable channels. Since the fund of savings is scarce, it must be economized Economy requires that it should be employed only where it is most useful. We have already seen how, if there were less inequality, the price system would serve to direct industry in accordance with this principle. The interest rate is part of the price system which accomplishes this. If there is overinvestment in any one industry, earnings therein will decline until enterprisers can no longer pay the prevailing rate of interest. This will prevent further investment of funds in that industry and check the overexpansion. On the other hand, if some line of production is underdeveloped, the prices of its products will rise until earnings become great. Then enterprisers will offer higher interest to lenders for such uses, thereby attracting investment and bringing about the needed expansion.

Could Interest Be Abolished?—In any system of social organization, these functions would have to be performed somehow. There are economists who have gone so far as to say that the interest rate provides the only satisfactory method of performing them, and that because of this even a collective state would find itself compelled to resort to interest payments.

It is conceivable, however, that under collectivism interest might be abolished. In such a society nearly all capital would be owned by the state. The state could decide how much new equipment to accumulate, by an estimate of present and future needs, without reference to any interest rate, and it could then lay aside out of its current revenues sufficient funds to provide for this equipment. Since such a society would not have to rely on private saving, it would not be necessary to offer anyone the inducement of interest, and a council or commission might be appointed to decide how much investment was needed. If the collective state maintained a system of exchange and prices, however, it would be natural for it to base its prices upon costs; and, in its system of cost accounting, it would be wise to figure interest upon the equipment used, whether it was called by that name or not. Otherwise the state would have no means of allowing for the costs of employing equipment in production. But here interest would be merely a bookkeeping device, and no interest would actually be paid to private capitalists for the use of their funds.

Our present concern, however, is not with collectivism, for we are endeavoring to work out a program for the reduction of inequality without so radical a departure from the system of capitalism. The payment of interest appears to be unavoidable so long as we have free enterprise and competition. There is no other way for the functions just described to be performed. We need have no reluctance in coming to this conclusion, for there is no reason to regret the payment of such interest. It can readily be shown that it is quite justifiable, and that the collectivist argument, which holds interest to be robbery, is faulty.

The Justification of Interest.—In the previous chapter we set forth the tests by which we could judge of the justness of any form of income. We said that income is earned (and therefore justified) when it is received in payment for the performance of a service, at no more than the normal competitive price of that service. Our analysis of interest indicates that the investor does perform a service to the borrowers from whom he receives interest. His savings bring to the producer-borrower that surplus product which the roundabout process yields, and they give to the consumer-borrower the immediate use of valuable equipment which it would take him years to pay for from his own resources. Also, the rate of interest is fixed in a competitive market. It therefore meets our second test. Nor is this rate usually high; on the contrary, it is generally quite moderate, seldom rising above 5 or 6 per cent per annum on reasonably safe loans. It is further justified by the fact that, for those whose incomes are moderate, saving involves some sacrifice, to induce which it may be expedient to offer the reward of interest. This is a consideration that will be of greater weight as incomes become more equally distributed.

The above argument justifies interest only when it is derived from in-

vested *voluntary* savings. When interest is paid to banks for the use of created bank deposits in a process of general credit expansion, it must be regarded as unearned. We learned in Chapters XIII and XV that the banking system, through its power to create money in the very process of lending it, can put funds at the disposal of borrowers without any act of voluntary saving on the part of individuals. The result is that the broad mass of consumers are forced to curtail their consumption involuntarily, because of the rising prices brought about by inflation of the monetary circulation So, industry is provided with equipment at the expense of consumers, without the consent of the latter. These consumers do not receive any interest from the investments thus made possible at their expense; the interest goes to the banks It is, therefore, clearly unearned by the latter.

The Laborer Is Not Robbed.—It is not true that labor is robbed of its due when interest is paid to investors It is true that all capital equipment is produced by labor, both manual and mental, working with land, but the product of most laborers in present society is a future one Most people are employed in manufacturing goods, not for immediate consumption, but to be used in the production of consumable goods at some later time This roundabout process would not be possible unless there was available a surplus of present income by means of which laborers working on future products could be supported, and even the presence of such surplus would not insure the continuance of roundabout production unless those who have the surplus were willing to devote it to that purpose. The capitalist, by saving his surplus and investing it, does this. His investments very largely take the form of an *advance* of wages to laborers The laborer is paid from day to day or week to week, in immediately consumable goods He receives payment now for a future product. He can hardly expect to claim at once the full value of what he is producing, when that product is not yet available If labor was able and willing to wait for its product to assume its final form in consumable goods, it could get it all, but this would mean doing without wages in the present—a proposition that would not appeal to laborers Of course, labor is not in a position to wait for the final culmination of the roundabout process, because it does not have the surplus to live on in the meantime, but the absence of such a surplus is not in itself the result of interest-taking. It is the result of those general causes which make for inequality.

In fact, as Professor Carver points out,[1] attacks upon the institution of interest nearly always confuse it with other issues. Those who attack it think of the rich capitalists who live upon the income from large fortunes without working, and they contrast this with the relatively low incomes earned by those who are forced to obtain their living by arduous toil But interest is not responsible for this condition No one ever made a fortune by receiving interest on invested funds It is true that people inherit riches

[1] T N Carver, *Essays in Social Justice* (1915), Chapter VIII

and then live on the interest therefrom, but the cause of this situation is in the institution of inheritance, not that of interest. Again, people become millionaires in some business venture, and then may live on the interest from the millions. But if this is objected to, the remedy lies in preventing the amassing of such fortunes, not in abolishing interest. There is no reason why the institution of interest need be interfered with. It is an earned income, the payment of which performs useful functions. The key to the problem of inequality lies elsewhere.

B. The Rent of Land

The Nature of Land Rent.—We now turn to consider the income derived from land. Under capitalism, most of the land is owned by private landlords, who receive a rent for its use. If they cultivate the land themselves, they get the rent in the form of products. If the land is leased to tenants, they receive it in the form of money payments. We are now concerned only with that part of this income which is derived from the bare land itself. We must distinguish this carefully from the return which may be attributed to improvements on the land, such as buildings, fences, roads, drainage, and the like. All such improvements are equipment created through the investment of savings. According to the analysis of Part A of this chapter, the capitalist is justly entitled to interest on such investments. A landowner, however, very often receives from his real estate an income in excess of such interest on the value of the improvements. The surplus he obtains is due to the value of the land itself, as a site or mere piece of ground. It is this pure land rent that we are now to study.

In colonial America, vast acres of unused land abounded, while settlers were few in numbers. Under these conditions the land was practically free. About all that was necessary to secure ownership was to clear a piece of ground and settle upon it. As the population grew, three tendencies became manifest. First, the most desirable lands gradually became occupied. Second, as these lands were more intensively cultivated, a tendency to diminishing returns appeared. Third, it then became necessary for new settlers to find employment by developing lands poorer in fertility or less desirable in location. The principles of economics teach us that as a result of this situation two margins of cultivation appear where the returns in product, per unit of labor and equipment applied to the land, are relatively low. There is an intensive margin, represented by the least profitable application of labor and equipment on the better lands, and an extensive margin, represented by the poorest lands which are cultivated. When this situation has developed, the owners of the better land are able to command a price for the use of their superior holdings. The tenant is willing to pay such a price, because, by the use of the superior land, he can produce more than is obtainable at

the extensive margin of cultivation where free land is to be had. The amount of the rent yielded by the better lands is roughly measured by the surplus value of the product obtainable on them, as compared with the product at the two margins. This principle is embodied in the so-called Ricardian law, which is the accepted explanation of land rents. This law states that the rent yielded by a piece of land is equal to the surplus value product which labor and equipment can produce on that land, over what they could produce at the margins of cultivation.

Land Rent an Unearned Income.—The receipt of such a rent by landlords has been a most severely criticized feature of the present economic order. Its critics argue that land is not the product of anyone's labor or industry, and therefore should not be appropriated by any individual. It is a gift of nature which rightfully belongs to society at large, and not to any privileged landowning class. To permit any group of landowners to appropriate this natural heritage is particularly obnoxious, they say, because land is the very basis of life itself, and everyone necessarily depends upon it. This dependence puts the landowners in a position of advantage where they can exploit the rest of the community, deriving income from the mere ownership of land without contributing anything in return.

Properly understood, this argument is substantially sound. If we apply to land rent our test of earnings, we will see that land rent is unearned by the landlord. Land performs a great service in production, to be sure, but the landowner, merely as an owner, does not. He is not responsible for the existence of the land. It would be there, with all its natural advantages, no matter what became of him. It would have been there if he had never been born. Nor is the value of the land the result of any action performed by him. Some lands naturally possess better qualities than others, and he who owns them can profit by those qualities. As population grows and the land becomes scarce, it simply acquires a value which the landowner can take.

This *unearned increment,* as it has been called, is conspicuous in the case of city building sites. As the population of a growing city increases, good locations suitable for business purposes in the central section become more and more valuable. The paving of streets, the construction of railroads, and other improvements made by the community likewise increase the values of land near to such centers, and these influences may extend for many miles out into the country. In time, the business possibilities of central urban sites become so great, due to the presence of large numbers of people in a small area, that the lands in such locations soar to fabulous prices. Values running into thousands of dollars per square foot are not at all unusual, and small lots in the hearts of our cities may be sold at figures running into millions of dollars. The owners of such sites can lease them for enormous yearly rentals, which they cannot be said to have earned, for these values are created by the general growth of the community.

It is true that, in many cases, the owners of land have done a great deal to improve it. Early settlers cleared, fenced, and drained it at the expense of much hard work. Buildings have been erected upon it, and roadways constructed through it. It should be clear from our argument that such owners are entitled to an income sufficient to pay the replacement cost of these improvements, with interest on the savings invested in them. They are further entitled to wages, at prevailing rates, for their labor (both mental and physical) devoted to such improvements. More than this they cannot fairly claim, for more than this cannot be earned by other capitalists or other laborers who are not so fortunate as to own any land. But such interest and such wages are not, strictly speaking, a part of land rent. Even without these improvements, the land would still have value, and would yield an income if rented to a tenant by its owner. Take a piece of land in the country or the city. Raze the buildings on it to the ground; destroy all its fences, ditches, roadways, and other man-made features; but leave it with such natural fertility as it possesses and in its present location with reference to community-built roads, railways, cities, and the like—it would still command a rental value. That rent, the pure ground rent, is the share of income which is unearned by the owner.

Risks Not a Justification.—Some people would object to this reasoning. They would argue that land rent is justified by the risks which are run by the landowner. They would say that if an individual has sufficient foresight to anticipate the growth of a community, and is willing to risk his judgment by acquiring a piece of land which he believes likely to improve in value, he is entitled to the reward that results from his cleverness. But we should not pay people for running risks, unless the bearing of such risks can be shown to contribute some useful service to the community. The profits of a cotton speculator can be justified because he performs the service of stabilizing prices and evening the consumption of cotton from month to month and from year to year, but no such service is rendered by merely owning land. Why should society reward the incurring of risks that have no useful result? We do not so justify the winnings of a gambler. The risks involved in land ownership do not suffice to place land rent in the category of earnings, because they are not associated with social service.

The Social Function of Land Rent.—Although the landowner, as such, performs no service to society, land rent, like any other price, does have a useful function. Unlike interest, it does not greatly stimulate an increase in the supply of the thing for which it is paid, for land is not a producible commodity. High rents do result in some clearing of forests, drainage of swamps, and irrigation of deserts, but the amount of land that can be reclaimed in such ways is relatively small. This function of land rent, therefore, is not of much importance.

It has another function of considerable significance. Just as interest

serves to direct the investment of savings into their most valuable channels, so land rent allots land to its most productive uses. Lands vary greatly in productive qualities, according to their location, fertility, mineral deposits, and so on. Some are clearly better adapted for certain uses than others, but if we were to classify all the lands into such categories as city sites, residence sites, truck farming lands, staple crop lands, grazing lands, and so on, we would find that there is no hard and fast line between them. In each case there would be a margin of indifference where lands would be almost equally adapted to two or more different purposes. So it is possible to withdraw some land from one use and turn it to another, if occasion demands it. The adjustment of the supply for each use is adapted to the demand through the prices of commodities and the resulting effects upon land rents. Between any two alternative uses to which lands of a given type may be put, there is a margin of transference where it is just a little more profitable to use it for the one purpose than the other. Thus, one might use land for growing potatoes instead of tomatoes, so long as it paid to do so. But if the land is suitable for both crops, according to the principle of opportunity costs it cannot be employed for the one unless it will yield as high a rent as it would yield for the other. Hence, if the price of tomatoes rises, tomato growers can pay a little more for land to be used for that purpose, and this will raise the cost of it in growing potatoes, thereby forcing up the price of the latter and curtailing the sales. Some land will then be diverted from potato to tomato growing until a new equilibrium between the two crops has been reached. Thus, land rents, derived from the prices of the commodities to which the land is adapted, cause land to find its most productive employment, resulting in economy.

Is the Payment of Land Rent Necessary?—It has been contended that land rent cannot be abolished in any conceivable social order. There are bound to be differences in the qualities of different lands, which means that some are sure to yield products of greater value than others. This value surplus, which is the equivalent of money rent, must exist in the very nature of things. Moreover, if a price system is maintained in which prices are made to cover the costs of labor and savings on marginal land, such prices would more than cover the costs of labor and savings on better lands, because of the greater product obtainable, per unit of labor and savings, on the latter. Prices would then include a rent, paid by the purchasers of the products, and received by the landowner, whoever he might be. In answer to this argument, it might be said that the costs of labor and savings on all lands could be averaged, and prices established accordingly; but it is not likely that such a system of prices would prove very satisfactory because rent prices attached to land are needed to direct the land to its most productive employments. Any intelligent system of social accounting ought to attach prices to land based upon its value in its possible alterna-

tive uses, otherwise we would lack a suitable criterion for deciding how much land to apply to this purpose or that. Here again, this function might be entrusted to an economic committee or council which could use its judgment instead of prices as a guide; but if we were to maintain a price system, the most satisfactory means of doing so would probably be to include land rents as a part of it.

Alternative Systems of Land Policy.—Although land is thus to be considered an indispensable part of an intelligent price system, it is not necessary that this rent be paid to private owners. There are three possible policies with regard to land which a nation might pursue:

(1) It can leave the land in the hands of private owners, permitting them to receive the rents as they do now. We have already seen that this policy is undesirable because it puts into the hands of landowners an unearned income.

(2) Another possibility would be for the state to acquire all the land, either by purchase from its present owners or simply by confiscation. All lands would then become public property. This would be done under some forms of collectivism; but public ownership of land would not necessarily go as far as collectivism, for it need not involve the state operation of industry. The land could be leased to private individuals, who would carry on their industrial operations very much as they do today. These individuals, however, would be tenants, not landowners, and would pay a rent to the state for the use of the land The rents so collected could be employed in ways beneficial to the public at large, such as the building of highways and the extension of public schools.

It can be objected to such a proposal that tenants do not usually make the best cultivators. Since they have no permanent interest in the land, they are likely to abuse it, sapping its fertility without replacement, and not even providing against the wearing out of capital improvements. In fact, it has been argued that private ownership of land can be justified by the more rapid development and careful cultivation which takes place where the same individual is both cultivator and owner. Private ownership of land, however, gives no assurance that the owners will actually do the cultivating Absentee ownership, leaving the actual use of the land in the hands of tenant farmers, is widespread in Europe and is increasing in the United States. On the other hand, it is possible that the evils of tenant farming can be obviated if the tenant is given some permanent interest in the real estate which he cultivates If he were assured permanent possession of the land, together with actual ownership of all the improvements which he made thereon, satisfactory results might be obtained. This could be done without permitting him to appropriate the rent of the land itself. He would then have an incentive to cultivate efficiently, earning interest

on all of his investment, while the surplus due to the bare land would be appropriated to the public use.

(3) A feasible method of carrying out this idea would be to permit private individuals to own the land, but to require them to pay part or all of the rent to the state, in the form of an annual tax. A most interesting proposal along this line is the Single Tax program, which has been enthusiastically advocated by its adherents for several decades. In the next chapter we shall consider the advisability of incorporating this proposal, or a modification of it, into a general program for the reduction of inequality.

C. The Wages of Labor

The Nature of Wages.—The income of laborers consists mainly of wages There are many kinds of labor, and a different wage rate is established for each of them. Labor is not a homogeneous commodity capable of being shifted, like the mobile savings fund, into any employment where it is needed. On the contrary, it is divided by barriers of heredity, training, and other influences, into separate grades, known to economists as non competing groups. Hence, unlike the interest on invested savings, which tends toward a uniform rate, there are sharp, permanent differences in the prices that prevail in the labor market. Each wage rate depends upon the conditions of demand and supply for the particular type of labor concerned

According to the prevailing theory of distribution (income sharing), the demand in each occupation is based upon the marginal contribution of the laborers to the value-product of the industry. This marginal product is small, and wages are therefore low, when the supply of the given type of labor is large in relation to the other productive agents with which it must be employed Conversely, when the supply of labor is scarce, the marginal product is great, and the wage is therefore higher. The supply depends mainly upon the growth of population in each of the noncompeting groups of society. This, in turn, is considerably affected by the standards of living prevailing in these groups Where people are accustomed to high standards of living, the number of children per family is usually small, so that there is a scarcity of numbers which makes wages high among the laborers of that grade Where low standards of living prevail, as is usually the case among unskilled workers, large families are the rule, and wages are correspondingly low Each stratum or grade of labor has a choice of many different occupations which people in that group are capable of filling. The supply of labor available for each occupation within the grade will depend upon the relative attractiveness or unattractiveness of the different trades. Those trades which offer special advantages will be able to get labor at lower prices than those which are particularly arduous, or dangerous, or possessed of other disutility

As a result of these circumstances, we find considerable differences in wages (1) between the various noncompeting groups or strata of society, and (2) between occupations within each group. In addition to these there are also differences (3) between places which, being located at some distance apart, are not in the same labor market, and (4) between men and women in the same occupation. Inasmuch as these wage differences have a considerable bearing upon the problem of inequality, we must understand them and consider to what extent they are desirable and necessary.

Wage Differences Between Noncompeting Groups.—The most conspicuous differences in wages are those which result from the stratification of society into noncompeting groups. We find a few gifted individuals, such as opera singers, champion prize fighters, motion picture stars, and other geniuses, whose services command enormous fees; professional men, such as lawyers, physicians, architects, and the like, who receive generous pay for their services; skilled workmen, such as mechanics, engravers, and electricians, whose wages suffice for a comfortable living; and unskilled workers, such as ditch-diggers, cleaners, and general laborers, whose wages are quite low. So long as there are marked differences in the abilities of different classes in society, these differences in wages perform a useful economic function. Each employer, under the pressure of competition, seeks to keep his costs as low as possible; therefore he uses the cheaper grades of labor wherever he can, employing the high-wage workers only where they are most needed. Thus the high wages tend to direct the scarcer types of labor to those uses where they are most valuable. This contributes to social economy

But this does not mean that the stratification of labor into different levels is a good thing. It is certainly advantageous to have people of diverse interests and abilities, so that some are available to do each of the many kinds of work that production requires. It is unfortunate, however, that some types are so much more abundant than others that their wages must be deplorably low. Where the various economic classes are separated by artificial barriers, such as racial prejudice, lack of educational opportunities, and the like, society would be the gainer by the removal of such obstacles. For it is clearly to our advantage if we can take men who would otherwise be unskilled workmen, of relatively little usefulness, and make of them skilled artisans of much greater value in production. And where wage differences are the result of unequal natural abilities, we would increase the general prosperity of society if we could find means to reduce the percentage of births among people with poor heredity and increase the growth of population among the higher grades. Such measures would bring about an equalization of wages automatically, without upsetting the existing economic order or resorting to crude proposals for tinkering with wages. So long as an unbalanced distribution of human abilities persists, correspond-

ing wage differences cannot be eradicated, if the price system, with its resulting economy, is to be retained. In the next chapter we shall consider the possibility of reducing the differences between noncompeting groups along the lines which have just been suggested.

Compensating Wage Differences within Each Group.—Within each of the various labor strata, different rates of wages are paid in the various occupations open to the members of that grade, these differences depending on the relative advantages of the different trades. For instance, a painter of church steeples and other high buildings is paid more than painters of the ordinary sort; and common pick-and-shovel labor working in dangerous underground excavations, such as the so-called "sand-hogs" employed to dig tunnels under rivers, is paid much more than is received by the same grade of labor working above ground. To the extent that wage differences thus compensate for the unequal advantages or disadvantages of different trades, they perform a useful economic function, for where labor has a choice of two or more occupations whose advantages differ, it will naturally go into the more attractive one. The higher wage paid for the work which possesses the greater disutility offsets this and serves as an inducement to secure supplies of labor for the unattractive jobs. There is thus a natural equilibrium which apportions labor according to the need for it in its various employments.

The perfect operation of this principle, however, is interfered with by a number of obstacles. Labor is often ignorant of its own opportunities, as well as lacking in foresight in the choice of employment; so that it does not always direct itself to the occupations that offer the greatest wage, in proportion to the advantages or disadvantages. Then, too, sometimes the nature of an industry changes, or a new machine is introduced, which decreases the market for a certain type of labor. In such cases there is an oversupply of laborers who have long been employed in the industry and who cannot readily enter a new skilled occupation. While the wage differences which result from these things are not uneconomical, they are not performing their function entirely to our satisfaction; for although low wages will prevail in the occupations which are overstocked and high wages in those where labor is lacking, the differences do not suffice to bring about the needed readjustment. Labor is not sufficiently mobile to shift from the poorly paid trades to the better paid ones. Hence, measures tending to increase the mobility of labor will help to bring about an equalization of wages and to apportion workers more economically among the various trades. An unjustifiable depression of wages in one line will thereby be corrected, along with excessively high wages in another.

Differences in Wages Between Places.—Where different wages for the same trade prevail between two different places, it is an evidence of a lack of economy in the distribution of labor. If labor in the building trades is

scarce in Chicago while it is abundant in New York, the wages of plasterers, bricklayers, carpenters, and the like will be high in the former and low in the latter. In this case it is apparent that the utility of such labor would be greater if some of it were moved from New York to Chicago The differences in wages prevailing between the two places tend to encourage such movement, and they therefore help to correct the maladjustment. To the extent that they do so, such wage differences perform a useful function. The fact is, however, that labor is lacking in mobility. In this respect it differs greatly from material commodities. If a high price for potatoes prevails in Chicago at the same time as a low price in New York, dealers in that vegetable will very quickly ship potatoes from the one place to the other, until substantial equality of prices in the two communities is established. Laborers, however, cannot readily give up their homes, and move themselves, their furniture, and their baggage away from their friends and associates into a new community. Hence the difference in wages is not effective enough to bring about a rapid adjustment. For this reason measures to promote greater mobility of labor, such as labor exchanges, are very desirable. At the same time, such measures will make for greater equality of earnings.

It is not clear, however, that labor mobility should be promoted on an international scale. Where differences in wages prevail between different countries, it is true that the low-wage labor would be more valuable to the world if it were moved to the place of higher wages. On the other hand, the differences in race and culture between the world's various peoples are so great that difficult social problems are created when international migration takes place. The presence in the United States of immigrants from southeastern Europe and Asia has caused grave problems in this country. Also, it is doubtful whether such migration is the best way to meet the problem of low wages in the countries from which the immigrants come. Low wages in such countries are usually the result of poor industrial efficiency and overpopulation. The exodus of large numbers of people will not correct either of these defects. The ranks of the departing are quickly filled by the high birth rate prevailing among those who are left behind. Meanwhile, the migrants increase the population and depress the wage level in the countries to which they go. A better cure for low wages in countries backward industrially lies in the adoption of progressive measures for economic reconstruction and for the reduction of an excessive birth rate. Attempts to adjust world wage levels to equality through international migration, therefore, are not advisable.

Differences in Wages Between the Sexes.—It has often been observed that women are usually paid less than men, even in the occupations where both are employed at identical work. To some extent this inequality is based upon a real difference in the efficiency of the two sexes Women are likely

to lose more time than men on account of sickness, and they frequently prove to be but temporary employees, because they are likely to marry and leave their employment after a time. Men are more satisfactory to their employers because of their greater steadiness and permanence. Where the wage difference rests on this basis, it accords with sound principles of economy; for if men are more valuable, a higher price should be attached to their services in order that they may be reserved for the most important work, leaving women to be employed where their handicaps are of less serious consequence.

On the other hand, not all wage differences between the sexes are to be attributed to this cause. We have not yet entirely recovered from the traditional belief that women are destined by nature to certain types of work deemed peculiarly adapted to them, and that the more skilled and remunerative employments should be reserved to men. This creates a prejudice against the entrance of women into certain of the professions and trades which is difficult to overcome. As a result, there is an overcrowding of women into such occupations as domestic service, teaching, department store selling, stenography, and certain types of factory employment, which depresses their wages in such trades. Where the difference in wages rests on such a basis, it is indicative of an uneconomical situation. It would be advantageous to break down such barriers of prejudice and custom in order that women might be admitted freely into the occupations where their labor would be more valuable. The familiar slogan "Equal pay for equal work" has a perfectly sound economic basis, but it can only be applied properly where the two sexes can really do work of equal quality.

Earned and Unearned Elements of Wages.—In most discussions of earned and unearned income it is taken for granted that wages are earned Marxian socialists class wages as service incomes, in contrast to the property incomes, which they regard as unearned. It is true that most labor performs a useful productive service, and therefore the wages received meet our first test of earned income. However, where workers are engaged in socially undesirable activities, such as prostitution, the sale of noxious medicines, or the promotion of mendacious advertising, their wages fail to meet that standard. Individuals possessed of a high sense of social responsibility refuse employment in these lines, while those with less social conscience, who are not unwilling to accept such employment, are sometimes deterred by the odium of public censure. However, the best means of preventing the prevalence of such antisocial activities is not to be found in measures directed against the individual wage-earner so employed, but in greater social control of the industries concerned.

If, in addition to being payment for a desirable productive service, the wage received by labor is established in a competitive market, then it meets the second, as well as the first, test of earned income. Sometimes the wage

is less than freely competitive conditions would bring about. This is the case in the sweated trades, where unscrupulous employers are able to exploit the ignorant immigrants crowded into our cities, when the latter might find more remunerative employment elsewhere if they were not handicapped by barriers of language and lack of knowledge of American conditions and possibilities. On the other hand, there are cases where wages exceed the rates which would be established in a freely competitive market. This is true where trade unions have secured a monopoly in their trade and, by strictly limiting the number of apprentices that can be taken into the industry, or by making it difficult to secure membership in the union, they have succeeded in creating a scarcity of labor. The excess wages in such cases are just as clearly unearned as the profits of any trust or big business monopoly. Again, an occasional shortage of labor in a given occupation, resulting from a sudden increase in demand or decrease in the supply, may boost wages for a time to a point far above the long-time normal level. One might also mention the exorbitant salaries of a few business executives; but these are really a concealed form of business profits, rather than wages. There are also the huge fees of certain geniuses—motion picture stars, singers, and the like, whose talents are so exceptional that they almost constitute personal monopolies. In general, however, there is little occasion to complain of excessive wages. The laboring class as a group is paid but moderately, and often poorly A general raising of the level of wages is essential to the correction of inequality and the promotion of national prosperity.

D. The Profits of Business Enterprise

Gross Profits and Pure Profits.—We must now turn to the fourth (and last) share of income—the profits of business enterprisers. Their share of the product of industry is composite, because they contribute more than one factor to production. Most enterprisers have capital of their own invested in their businesses. They may also act in the capacity of labor, performing the functions of supervision or management. Quite reasonably, they expect to receive from their businesses a return at least equal to the interest they might obtain from their capital by investing it in the loan market, plus whatever wages they could earn as employees for some other person. If there was not a fair prospect of such revenue, they would not enter into business for themselves. Hence, business may be expected normally to yield a profit equivalent to these two items. But, as enterprisers, they hope for more than this. It is the possibility of obtaining a surplus that induces them to undertake the responsibilities of maintaining businesses of their own. On the other hand, the uncertainties of their position

are such that they may suffer an actual loss. The total profits of a business in any one year, therefore, may be either large or small.

These total earnings, representing the excess of the enterpriser's receipts over his outlays for wages, materials, interest on borrowed capital, insurance, taxes, and the like, are usually known as gross profits. Gross profits are composed of three elements, corresponding to the above analysis. They are: interest on enterpriser's capital, wages of management, and pure profits The interest may include a rent derived from land owned by the enterpriser. Pure profits represent the difference between gross profits and the sum of interest on enterpriser's capital plus wages of management. So far as enterpriser's interest (including land rent) and wages are concerned, they do not differ essentially from the ordinary returns accorded to capital and labor in the loan and wage markets. What we have said about them in the first three sections of this chapter will apply equally to them here. Pure profits, however, are a different sort of revenue, which will now be discussed.

Pure Profits as a Reward and Inducement for Risk-bearing.—Some writers believe that pure profits may be justified as a reward for the risks of businessmen. The enterpriser is of necessity a speculator. Assuming the responsibility for the conduct of a business in an economic order where production is in anticipation of demand, he must hire his laborers and pay them in advance, and he must borrow capital on which he guarantees to pay fixed interest payments at regular intervals. These costs are incurred in advance of sales. There is a chance that production will be interfered with by strikes or other contingencies, or that, if completed, there will be no market for the product, or that the price obtainable will be too low to cover the costs. It is said that we cannot expect the individual to incur such risks without recompense, and hence, that he is entitled to some surplus above interest and wages of management. It is further argued that the recompense is not excessive, for many believe that if all the losses incurred by businessmen were balanced against the gains, the average surplus would be found quite small. There might even be a net deficit.

It is true that enterprisers incur risks, and that in doing so they often render service to the community. Certainly the consumer is benefited by having commodities produced for him in advance and offered in great variety for his use, to be purchased if he likes, or refused if they do not appeal to his fancy. According to the idea of just compensation which we have accepted, such risk bearing ought to be paid for at a fair rate of remuneration, as established by competitive bargaining But the present random allocation of profits to businessmen can hardly be justified on such a basis There is no established rate of remuneration for the risks of businessmen. There is just a mad scramble in an ever changing, dynamic world, with the most extraordinary fluctuations of loss and gain as a result There

is no relation between the losses of any one individual and his gains. He may have a deficit one year to be followed by a surplus the next, but there is no assurance that any constant or reasonable average will be maintained He may lose out completely and be forced into bankruptcy, while another may be successful throughout his career. Surely the high gains of one are not to be justified as compensation for the losses of another! Yet this is just what is implied when it is argued that profits are earned because the average rate of return is not excessive, and no more than compensates for the risk of loss. No doubt there is sometimes a relation between the profits of the individual and his efficiency Good judgment, knowledge of the market, and careful organization may be responsible for success, while incompetence and carelessness may often lead to failure. Yet we have no assurance that such is usually the case. On the contrary, there is every evidence that profits depend to a large degree upon mere chance or luck. Prices may go up, causing nearly everyone to gain, or they may go down, bringing general losses The demands for products fluctuate unexpectedly, new inventions upset the market, and many other things may happen to cause profits to rise or fall Hence, there is no definite correspondence between the risks borne by any individual and his profits He may bear risks for years and never be rewarded, while another whose risks are less may be rewarded much more fully There is very little justice in such a chaotic arrangement

The above concerns the argument that profits are a *just reward* for the risks of enterprisers Slightly different, and much more nearly valid, is the reasoning which would justify profits as a *necessary inducement* to risk-bearing. This does not attempt to defend them on the ethical principle that profits are a fair reward for risk assumed It merely asserts that the payment of profits is expedient, because without them businessmen would not assume the risks of production Hence some inducement in the way of special payment conduces to the social welfare In a competitive system of free enterprise, the payment of some reward for risk bearing is probably necessary It is not likely that production in anticipation of demand, with enterprisers assuming the responsibility, could take place without it, but some question may be raised as to the amount of reward that must be paid for this purpose, and the nature of the payment It is doubtful whether the excessive gains now obtained by some enterprisers are really required to maintain the system The prospect of some pure profit in addition to interest and wages is a reasonable price for consumers to pay for the services of businessmen, but need this reward run into millions? However this may be, the payment of such rewards will become less necessary as progress is made in the stabilization of business If we can improve the efficiency of business organization and of marketing, by such measures as are advocated in Chapters II and VI, and reduce the fluctuations of business, as

suggested in Chapter XIII, the risks assumed by enterprisers will be very much reduced. The payment of excessive profits will then no longer be necessary, although a moderate profit will probably always be needed so long as the system of capitalism prevails.

Pure Profits as an Incentive to Efficiency.—Somewhat similar to the defense of profits as an inducement for risk-bearing is the contention that they are justified as a stimulus to efficiency. In the preceding chapter our attention was called to the part played by the prospect of riches as an incentive to industrial achievement. Profits from the successful conduct of business are one of the principal sources of such riches. There is no limit to the gains that can be made by an able businessman if he is reasonably fortunate. This possibility undoubtedly spurs many persons to energetic activities which they might not undertake for a less strong inducement. We cannot know how great a part the lure of profit plays in furnishing the driving power for industry, but, great as it may be, there are serious defects in its operation.

In the first place, there is no necessary correlation between the amount of service rendered and the amount of profits received. Unless wages of management itself be taken as the measure of an enterpriser's contribution to production, there is no competitive price established as a standard. Hence, we can hardly believe that the amount of his gains is any sure criterion of the amount of his service. One may be much more efficient than another in the conduct of his business; his gains may be greater than that of his competitor by a millionfold. Are we then ready to state that his efficiency was a million times as great? If we accept this, then we must give up any attempt to reduce the inequality of incomes in society, for we would be forced to recognize the greatest extremes of inequality as expedient and proper. There are times, too, when the man who reaps the gain is not the one who really contributed to the achievement. Everyone is familiar with the fact that inventors, whose genius has contributed contrivances of remarkable value to mankind, have often been exploited by financiers, who bought their inventions for a song and then made millions from their manufacture.

This leads to the thought that in many cases profits result from business activity which contributes no useful service to the community at all. This is usually the case with those profits which result from chance. It is particularly true of those profits which result from sharp practices, such as the predatory manipulations of financial swindlers or the foisting of worthless products upon the consuming public. Many shrewd deals and corporate reorganizations which are legal and apparently respectable are nevertheless essentially rascally in their intentions and effects. Products may be adulterated and made to look like what they are not, or worthless and even poisonous nostrums may be widely sold through mendacious advertising.

Finally, profits are often the fruits of monopoly. Here the gain results, not from production, but from the curtailment of production; for it is only by limiting the supply of its product that the monopoly can exact a high price from consumers.

These considerations give pause to him who would approve of profits as the incentive to efficiency. Granted that they frequently spur businessmen to achievement, it must be admitted that too often they bear no relation to efficient service performed for society. The same must be said of the high salaries sometimes paid business executives. They are rather a concealed form of profits than ordinary wages.

Earned and Unearned Elements of Business Profits.—We may, then, conclude that there are both earned and unearned elements in business profits. The interest on enterprisers' capital, when derived from savings, is justified as earned by the argument of section A of this chapter. In so far as it consists of land rent it is unearned. True wages of management are mostly justified by the argument of section C, but exorbitant salaries, arbitrarily determined, consist partly of pure profits. Pure profits are earned only when they constitute reasonable payment for efficient service rendered in socially useful production. Where they are the result of chance, predatory business operations (such as financial manipulation, adulteration of products, the production of worthless commodities), or monopoly, they are unearned. Negative pure profits, or losses, may likewise be said to be earned, or deserved, where they are clearly the result of inefficiency, but are undeserved when they are caused by mere misfortune or chance. Wise social policy should seek to curtail both unearned profits and losses as far as possible.

SUMMARY

This chapter has been devoted to an economic and ethical analysis of the four major shares of income. We have tried to see to what extent these incomes perform useful economic functions, and to what extent they are earned, according to the tests developed in the preceding chapter.

Interest on voluntary savings (as distinct from that on created bank deposits) is earned because (1) it is paid to capitalists for rendering the service of financing the production of equipment, without which the roundabout process could not be carried on; and (2) it is paid for at a low rate, established in the competitive loan market. Such interest performs the useful economic functions of regulating the proportion between provision for present and future income, and of directing investment into its most important channels. Although interest might be abolished, it would be a useful part of any price system, even under socialism. Radical attacks on interest confuse it with the problem of large fortunes, an essentially separate issue.

The rent of bare land, exclusive of improvements, is an unearned surplus arising from the scarcity of desirable land and its consequent value in production. Land rent performs the function of apportioning the various kinds of land to their most productive uses, but the landowner, as such, makes no useful contribution. Although the apportionment could be done in some other way, it is most readily accomplished through rent prices attached to land as part of a general price system. This rent, however, need not be paid to private landowners; at least a part of it can be appropriated to the public use.

The wages paid to labor differ greatly between noncompeting groups, between occupations within a group, between places, and between the sexes. In so far as such differences cause labor to be withdrawn from places or occupations where it has little utility to those where it has greater utility, they promote economy. All four types of wage differences have this tendency, but it is seriously interfered with by the immobility of labor, thus causing wage differences to persist which would otherwise be removed by the redistribution of labor. Hence, measures for promoting the increase of high-grade and decrease of low-grade labor, the migration of labor from occupation to occupation within a group, and between places within a country (but not between countries of different races and customs), and also those tending to reduce the prejudice against the employment of women in certain trades, are desirable Most wages are earned, but those resulting from antisocial activity, from trade union monopoly, from individual monopolies, or from artificial scarcity, are not

Of the three elements of gross profits, interest on enterprisers' capital, where derived from savings but not from land, is earned Wages of management are likewise earned. Pure profits are earned only where they constitute a reasonable payment for efficient, useful service. Excessive pure profits cannot be justified as a *reward* for risk-bearing, for there is no correlation between an individual's risks and his gains. Some profits are justified as an *inducement* to risk-bearing, but this will become of less importance as business stabilization progresses Some pure profit can be defended as a necessary inducement to efficient production, but the argument is weakened by the fact that many profits are made without service being rendered to the community. Such profits should be prevented if possible.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

Much material for this chapter has been suggested by the able and interesting analysis of income shares contained in H D Henderson's *Supply and Demand* (1922), Chapters VI to IX, inclusive Professor T N Carver, in his *Essays in Social Justice* (1915), especially Chapters VI, VII, VIII, XI, and XIII, also offers a thoughtful criticism of these incomes, presented in his usual stimulating style. F M Taylor, in his *Principles of Economics* (1921), Chapters XLII to XLV, en-

deavors to defend the existing system of income division. He appears to approve of it almost entirely. On the other hand, R. H. Tawney, in *The Acquisitive Society* (1920), especially Chapters I to V, takes a searchingly critical, but constructive, attitude. An analysis of earned and unearned incomes, especially rent, is contained in Part II of H. G. Brown's *Economic Science and the Common Welfare* (sixth edition, revised, 1936); also in Chapters XII to XVI of his *Basic Principles of Economics* (1942). For a strong presentation of the view that profits are derived from predatory rather than serviceable activity, one can hardly improve upon T. Veblen's *The Theory of Business Enterprise* (1904).

CHAPTER XXIII

The Reduction of Inequality

A. The Causes of Inequality

A Scientific Approach to the Problem.—In Chapter XXI we surveyed the facts showing how unequally the income of the United States is distributed, and we learned why this inequality is undesirable. In Chapter XXII we examined the four shares of income in some detail to ascertain how far they could be justified, and to what extent modification of them seems desirable. With these discussions as a background, we are in a position to work out a program for the reduction of inequality.

It would be futile merely to divide the income of the country equally among the people, regardless of their ability or productivity, or of other economic considerations. Vilfredo Pareto explained that "After a short time the inequalities, which had been destroyed, would reappear. Equality could only be maintained by periodic redistributions at short intervals."[1] But this does not mean that there is no remedy for unequal distribution. "Such statements amount to no more than saying that, if the present fact of inequality is suddenly removed, while the causes which have produced it in the past are left in operation, the fact of inequality will reappear in the future. It is equally true to say that, if we bail out a leaky boat, it will continue to let in water. But this throws no light either on the causes of the leak or on the practical possibility of repairing it."[2] Professor Carver goes so far as to say: "We can have any degree of equality we want, and in the strictest harmony with economic laws, *if* we are willing to pay the price and to pursue a constructive program in harmony with economic laws. Economic laws are not opposed to equality. They do, however, interfere with certain ideas of equality. Gravitation does not prevent aviation; it does, however, make certain systems of aviation impossible, as Darius Green found to his sorrow. Economic laws interfere only with the plans of the Darius Greens of social reform."[3]

A sound program must attack the causes of inequality. If we can remove or modify them without interfering seriously with production, and without bringing on other economic disaster, we should do so. Some of

[1] Cited in H Dalton, *Some Aspects of the Inequality of Incomes* (1920), p. 241.

[2] *Ibid*

[3] T N Carver, *Essays in Social Justice* (1913), p 266.

the causes are specific and immediately apparent; others are more general and remote. The former are more easily controlled, but their elimination is less likely to meet the problem. The latter are more difficult to get at, but their removal is all the more important because they are fundamental. It is not likely that society in the near future will be able to solve the problem of inequality completely. It may be necessary, therefore, to resort to makeshift measures which treat the symptoms rather than the disease, relieving the more acute suffering which is caused by unequal distribution without eradicating it. Before committing ourselves to a program, however, let us undertake an analysis of the causes, beginning with those which are more fundamental and remote.

Differences in Heredity.—An obvious source of the inequality of incomes lies in the different abilities of human beings. These differences are inborn to a large extent. It is not true that all men are created equal. Some are larger, stronger, more vigorous and powerful in physique than their fellows. Some are gifted with one talent, such as musical or artistic ability, while others show aptitude in another field, such as the sciences or mechanical arts. Psychologists have recently demonstrated that various grades of intelligence are exhibited by our people. Intelligence tests applied to millions of men drafted for service in the two world wars showed marked differences in the mental levels of the soldiers examined.

Such differences as these are largely hereditary. While it is not denied that differences in human ability can be considerably modified by the influence of the environment, nature has endowed each person at birth with different capacities, and these capacities set limits of achievement beyond which one cannot hope to go. It is native intelligence, and not the development of mind resulting from education and experience, which the abovementioned tests are designed to show. It is natural that such differences should lead to inequalities of income. We should expect the more gifted members of society to be more successful than their less well equipped fellows. If one is born with genius of the right kind, one is pretty sure to rise to a position of affluence, while the person of very low capacity will usually be living in a state of comparative poverty.

Differences in Environment.—Not all the inequality which prevails in modern society, however, can be explained in this way. People are not only unequally endowed at birth, but they are offered unequal advantages by the environment in which they are placed. Although America may justly be considered a land of opportunity, these opportunities are by no means equal for everyone. Some are born in well-to-do families, which enables them to get an especially favorable start in life. The superior home influence gives them a better training, and they are more likely to obtain a good education. When ready to make their own living, relatives or friends secure them a desirable appointment. In addition to all this, they may in-

herit wealth, which assures them a large income or the capital necessary to launch them into businesses of their own. Those who are so unfortunate as to be born in poorer families are much less likely to enjoy the advantages of an uplifting home influence. Their health may be impaired by improper food or unsanitary conditions of living. They have less chance to obtain a good schooling. There are no friends to place them in executive positions, and there is no inheritance to provide them with capital. It is no wonder that such inequalities of opportunity lead to great inequalities of income.

In addition to these influences, which arise out of wealth and poverty, there are the forces of chance, which are very whimsical in bestowing their favors. The lucky discovery of oil on one's farm, a new development in science, an unexpected increase in the demand for one's product, even some sudden disaster to one's competitor—any of these may be the source of a fortune. Or, the death of a parent, the accidental injury of one's body, an earthquake or flood, the devastation of war, or an unexpected turn in prices, may be the cause of poverty.

The Sources of Great Fortunes.—So long as we speak in such general terms are these, it will be difficult to point the way to a reduction of inequality, for who can hope to give a single formula which will establish an equally good heredity and an equally favorable environment for everyone? But the general causes operate in specific ways. Hence, there are specific sources of riches and poverty, which, being more tangible, are easier to control. A survey of the manner in which our millionaires have obtained their wealth will give us a view of some of these. Most of us are already familiar in a general way with how such fortunes are made.

Very seldom do they arise from wages. No doubt the large salaries occasionally paid in industry have been responsible for some moderate fortunes, but one cannot accumulate millions from such a source. There are some conspicuously wealthy persons whose incomes have been derived from purely personal services. A number of motion-picture stars are reputed to have amassed millions through their acting, and it is well known that a world's heavyweight prize fighting champion is paid tens of thousands of dollars or more for a single encounter. But these winnings are more truly to be regarded as profits than as wages, and they frequently take the form of royalties on sales, or a percentage of the gate receipts

Interest, also is never the source of a fortune, for interest payments of any considerable size can only be derived from a fortune that is already large.

If riches are not acquired from wages or interest, they must be derived from land rents or business profits This is, in fact, usually the case Not a few fortunes have been made from rising land values, through speculation in real estate The growth of land values in New York has been responsible for creating or increasing a great many fortunes, and nearly

every large city has its rich citizens whose money has been made in a similar way. The period of wild speculation in Florida lands from 1923 to 1925 made fortunes for many, although much money was lost in the subsequent collapse of that boom.

Great fortunes have also been made in the exploitation of such natural resources as coal, oil, copper, lumber, and the like. When these have been acquired in the early stages of development, they have subsequently proved to be worth enormous sums. We have our coal barons, our copper kings, and our oil magnates, whose unofficial titles reveal the sources of their riches.

Perhaps most great fortunes have had their origin in business profits. These cannot always be separated from land rents, especially where the money has been made in some industry devoted to exploitation of a natural resource, such as those just mentioned. Occasionally, enormous earnings result from the sheer efficiency of some productive enterprise. Very often, however, excessive profits result from the enjoyment of monopoly power. The monopoly may be in the form of a patent on some extraordinarily useful commodity, or it may arise through the control of natural resources, or by the mere combination of a few large plants into a single enterprise. Others have acquired riches through various financial manipulations and speculative deals. Still other profits have come from chance. The sudden discovery of oil has made millionaires, in some cases, of Indians who are too ignorant even to administer their own wealth.

Our earlier discussion of earned and unearned income showed that it is principally profits and land rents which contain unearned elements. We now see that it is from just these sources, in the main, that most of our large fortunes are derived. We are justified in the conclusion, therefore, that these fortunes are usually—although not always—at least partly unearned. This does not mean that our very rich men are to be morally censured for the possession of their unearned wealth. In some cases, it is true, they achieved their success by unscrupulous methods and predatory practices which are justly to be condemned; but for the most part they simply adapted themselves skillfully to the economic system in which they lived, and profited thereby. Rather than attack them as individuals, therefore, we should set about correcting the features of the system which make unearned gains possible. From our analysis it appears that if we can do this, we will at the same time go far to prevent the amassing of excessively large fortunes.

The Role of Property Institutions in Inequality.—The institutions associated with private ownership of property in capitalistic society play a great part in the building up of large fortunes. Prior to the Industrial Revolution, exchange was little developed. Money was little used, and there was not nearly so much capital equipment in industry as there is today. Under

these conditions, one could amass wealth only by acquiring land or by laying up hoards of consumers' capital. The only rich capitalists were landed aristocrats who obtained their property by grants from the crown or by inheritance, rather than by accumulation. The institutions of modern industry have changed all this. Now a vast amount of material equipment is employed in production, from the ownership of which an income can be derived. Most of this equipment is held under the corporate form of business organization, and it can be conveyed from person to person by the simple process of selling bonds or shares of stock. These securities constitute a kind of intangible property which can very easily be held without the owner's participating directly in the management of the real wealth which they represent. They also make possible speculative deals and manipulations of various sorts which could not have been carried on under the old regime. This permits many kinds of financial transactions in which a profit can be made, and it also allows enormous concentration in the hands of a single individual. On the other hand, the division of the stock of corporations into numerous shares permits a large aggregation of capital to be owned by a great many different people. The corporate form is not incompatible with a wide diffusion of property ownership. In fact, there has been manifest in recent wears a tendency for the ownership in some corporations to be scattered among an almost incredible number of stockholders, sometimes running into hundreds of thousands.

Nevertheless the facts are that the ownership of property is largely concentrated in a few hands. Various studies have been made of this, based on records of the probate courts, which show the value of decedents' estates, or on other data. All indicate that there is more concentration in the ownership of property than there is in the distribution of income itself. This means that incomes from property go mainly into the pockets of a few rich people. No doubt this is one reason for the improper classification of property incomes as unearned which was commented on in the preceding chapter.

The Inheritance of Wealth.—A characteristic of the property institution that is particularly important for our problem is the transmission of wealth from generation to generation by inheritance. The accepted practice in capitalistic society is to allow the owner of property to pass it on to the members of his family or to others, without very much restriction. So it happens that a fortune once made by an individual can be enjoyed thenceforth, not only by himself, but also by his heirs. Such inheritance cannot be said to *cause* inequality, for the wealth has already been accumulated before it is inherited, but it does *perpetuate* it. And it perpetuates it in a form particularly obnoxious to many thinkers, because it gives to the descendants of the rich an advantage which they have in no way earned. No matter how much the original creator of a fortune may

have worked to secure it, and even though he may have earned every dollar in productive service to the community, his descendants can hardly be said to have any just claim upon it, having had no part in the getting. They receive it merely because they happen to have been born into a family of wealth. An accident of birth hardly justifies them in having such wealth. This practice of passing on wealth to one's beneficiaries makes possible the maintenance of a leisure class, whose members can live in idleness and luxury without contributing any productive service.

This reasoning appears shocking to many persons who have so long been accustomed to the inheritance of wealth that they accept it as part of the plan of life. To them inheritance is a "natural and inalienable" right, with which man should not interfere. The doctrine of natural and inalienable rights, however, has long been discarded by well-informed thinkers. If, by natural rights, is meant those which exist in a state of nature, it may be replied that there never were any such rights. In nature everything belongs to him who can take and hold it against his enemies. Only when society established courts and a police force to maintain the *security of property could the right of a man to bequeath his fortune to* his heirs be established. Philosophers and courts agree that the institution of inheritance is a *privilege*, conferred upon property owners by society. Such being the case, society may and should restrict or abolish this privilege if it is in the social interest to do so. There are no rights which men enjoy that are inalienable, in the sense that society cannot curtail them or take them away in the interests of the general welfare. We believe in the value of liberty, yet we do not hesitate to imprison those who cannot exercise the privilege of liberty without injury to their fellows. We even take away the life of those who have committed certain heinous offenses. Inheritance, therefore, must be scrutinized in the light of its effects upon the social welfare, and we may modify it if we find it expedient to do so in order to establish greater equality of incomes. We will consider the advisability of this in the latter part of this chapter.

Low Wages as a Cause of Low Income.—As profits and land rents are the source of most very great riches, so wages are the source of low incomes. The poor are poor partly because their income consists mostly of wages, and the wages of most people are relatively small. We have already learned that the lowness of wages is due to the abundance of certain types of labor, relative to the demand for them, and that this abundance is largely the result of the stratification of society into noncompeting groups, with attendant overcrowding in the lower strata. We shall presently consider what steps may be taken to remedy or alleviate this condition.

B. The Reduction of Large Fortunes

Checking the Unearned Incomes.—Having analyzed the causes of inequality, we can proceed to consider what may be done to reduce it by removing or modifying those causes. We have investigated the specific sources from which large incomes are made, and those from which low incomes result. Let us attack the problem from two corresponding angles, endeavoring to find means (1) to reduce excessively large incomes, and (2) to raise the lowest incomes.

In seeking to place obstables in the way of obtaining great riches we must not be unmindful of the danger, to which we have referred, of discouraging productive effort. We should allow generous recompense to those who contribute service of great value to the community. Our analysis indicates, however, that many, if not most, large fortunes are partly unearned, and therefore derived in unproductive or socially undesirable ways. Hence, if we can devise means of preventing the undesirable kinds of business activity, we will greatly check the making of great fortunes without denying adequate rewards for useful achievement. This will not prevent some people from obtaining large incomes by useful work, but these gains will seldom reach the enormous figures of our present millionaires, and so long as they are earned we need not be greatly concerned about them. It is the reduction, and not the complete elimination, of inequality that we are seeking.

The Single Tax Proposal.—A good point at which to begin such a program is with the rents derived from land. We have found this to be one source of unearned great fortunes. It was suggested in the last chapter that a convenient way to prevent the private appropriation of such rents is through taxation. The most widely discussed proposal to accomplish this is that known as Single Tax.

In the latter part of the nineteenth century Henry George, a writer of ability, was struck with the peculiar paradox that, in spite of the tremendous increase in production and wealth which had resulted from the advancement of civilization, poverty remained. He was also impressed with the rapid growth in land values and the resultant speculation which prevailed at that time. He came to the conclusion that in these rising land values lay the explanation of the paradox. Land rents were absorbing the increase in production, and labor was not getting the benefit of it. From this reasoning he worked out a proposed remedy, which he published in his famous book, *Progress and Poverty*, in 1879.

George took as his starting point the Ricardian law of land rent, which states that the rent yielded by a piece of land is equal to the surplus product obtained on the land over what can be obtained by an equal amount of labor and equipment applied at the margins of cultivation. This means

that labor and the owners of equipment can get no more than they are able to produce on the poorest land in use. If any piece of land, because of its superior fertility or advantageous location, yields more than this, the surplus goes, not to the laborers who performed the work, nor to the investors who provided the equipment, but into the pockets of the proprietor who owns the land. George reasoned from this that, as population grew, the best land would all come to be occupied, forcing newcomers to settle on inferior plots. Diminishing returns would set in, causing the product obtained at the margin of cultivation to become smaller and smaller. This would keep wages down to a subsistence level and interest at a minimum, no matter how great might be the increase in production caused by new inventions and progress in the arts. The entire gain, therefore, would be absorbed by rising rents on the better lands, and would serve only to enrich the proprietors.

He reasoned that these rents were unearned by the landowners who, therefore, constituted a sort of plutocratic aristocracy, fattening at the expense of the rest of society. He proposed a simple remedy for this injustice. It was to tax away the rent of land from its present owners, and give it to the state, to be used for the benefit of the community. Believing that such a tax would yield enough to pay for all the expenses of government, he held that all other taxes could and should be abolished. The tax on land would be a *single* tax, from which all public revenues would be derived.

It is to be noted that, under this plan, a real-estate owner would not have to pay a tax for improvements on the land. He could erect a building on which he could earn interest, and this interest would not be taken by the state. If he owned a mine, he would not have to pay a tax on the shaft, tunnels, breaker, power plant, or other improvements which he had caused to be made there. What the state would take would be only the rental value of the bare land itself as a natural resource; thus only the unearned increment would be touched. This would place the landowner virtually in the position of a tenant, holding his land on perpetual lease from the state, to which he would pay an annual rent. In some of our largest cities somewhat similar arrangements prevail today in the central business districts; that is, the sites are occupied by tenants on leases of ninety-nine years or thereabouts, and the tenants make all the improvements, paying rent for the land—but in this case the rents are paid to private landowners instead of to the state or municipality. The existence of these entirely voluntary private arrangements shows that George's basic proposal is quite feasible.

George believed that the Single Tax would solve the problem of inequality and eliminate poverty because he held land rent to be the only source of unearned income. Since the state would take this away from private landowners, the original source of exploitation would be permanently removed. The rest of the community would benefit in three ways. In the first place,

they would be relieved of all other taxation—a very considerable saving. Secondly, Single Taxers believe that the income derived from the tax would be more than enough to meet the ordinary expenses of the state. The surplus could be spent for general welfare projects, such as increased education, better roads, improved public health, slum clearance, and so on. Finally, it is claimed that the Single Tax would increase the total income of the community by encouraging production. It would remove all the burdensome taxes which now hamper production, and it would make it unprofitable for people to hold land in idleness for speculative purposes, because as fast as its rental value increased, the tax would be raised correspondingly. Every landowner would be impelled to put his land to the most productive use in order to make it pay the tax.

This unique proposal, at once so simple and sweeping, is advocated as a panacea to remove, at one stroke, all the inequalities of income division and release the full forces of production. It has been hailed with enthusiasm by many converts, who today carry on an active propaganda for its adoption.

Some Objections to Single Tax.—While some of the suggestions contained in the proposal are not without merit, the plan, taken as a whole, is open to a number of objections:

In the first place, it greatly exaggerates the importance of land rents when it assumes that these rents absorb most of the fruits of economic progress. It wrongly assumes that wages cannot rise because of the pressure of population growth. The fact is that, in this country, progress in the arts has taken place faster than the growth of population, so that production at the margin has not been pressed down to a subsistence level. On the contrary, real wages have risen substantially since George's time. Land rents have not absorbed all the fruits of progress.

In the second place, the expenses of government have risen so much that the Single Tax would not suffice to pay these expenses, much less to provide all the betterment work that the Single Taxers originally believed it would make possible. It would have to be supplemented by other taxes. However, this is no objection to taxing away the rent of lands as part of a more general tax program.

A serious objection to the program rests in the fact that its adoption now would confiscate the savings of people who acquired land ownership by purchase, rather than by settlement. If the colonists and homesteaders who first acquired title to the land of our country had been compelled to pay rent for it to the state from the very beginning, there would have been no injustice, but suddenly to start taxing every piece of land at its full rental value now, would constitute unfair discrimination against those who have invested in the purchase of land as against those who have put their savings into equipment. To take away the income derived from savings invested in land would amount to confiscating those savings.

Are we then, to permit the unearned income from land to be appropriated by private owners forever, thus perpetuating social injustice, in order to protect those who have innocently purchased land in the expectation that they would be permitted to enjoy the income therefrom? This would hardly do. We must not perpetuate bad institutions merely because it will bring harm to some members of society to set them straight. Perhaps the best way to go at this would be by a more moderate program, which would approach the problem by gradual steps

A More Moderate Land Tax Program.—Our analysis of land rent in the last chapter led to the conclusion that, by our test of earnings, this share of income is unearned. This supports the Single Tax contention that we should do away with the private appropriation of incomes from this source. Many, and probably most, economists support this view, but are keenly aware of the injustice of taxing away the vested interests of present landowners. Therefore, they are inclined not to disturb existing rents, but they do favor the appropriation of future increases in land values, by a so-called *unearned increment tax*. As the rent-yielding capacity of a piece of land rises, due to the growth of the community or other causes, an annual tax could be laid upon it sufficient to confiscate this unearned increase without in any way disturbing the present value of the land and the income derived from it. The desirability of this is strengthened by the fact that authorities on public finance are now generally tending toward the view that land is a more suitable object for taxation than the improvements erected upon it. Hence it is believed wise gradually to reduce the tax on real-estate improvements, while increasing those upon the bare land itself. In time this might be carried to the point where the improvements were no longer taxed at all, and the land taxes were so large as to absorb the major portion, if not the whole, of the land rent If this increase in land taxation were made so slowly that the burden in any one year would not be oppressive, and in such a way that the major part of it would fall upon succeeding generations, the injustice to those who have invested savings in land would not be serious. Another possibility would be for the law of inheritance to be so changed as to provide that all land transferred at death should henceforth be subject to a tax sufficient to appropriate the rents thereof.

In working out this program, the state should be careful not to tax the land so heavily as to encroach upon man-made improvements. The owner should be allowed a sufficient return to make it worth his while to maintain the fertility of the soil, and he should be allowed a return on such improvements as embankments, underground drainage systems, and the like, which, though they may appear to have become a part of the land, are really to be classed as equipment.

Land taxes should never be made the sole source of public revenue, partly for the reason, already given, that they would not prove sufficient, and also

because there are other taxes equally desirable from a social point of view. Besides, the Single Taxers are wrong when they say that land rents are the only unearned incomes. Our analysis has shown that there are many others It is therefore reasonable to tax these other revenues or to appropriate them in some other way for social use.

The Reduction of Excessive and Unearned Profits.—Our study of the sources of great fortunes indicated that they are more often derived from business profits than from rising land rents. If we would prevent the amassing of such fortunes, therefore, we must find some means of curtailing profits of excessive size.

If we are to appropriate the unearned increment from land by taxation, it might be thought that the most suitable way to attack the problem of excess profits would be by similar means. Taxes upon the excess profits of business enterprises or upon the net incomes of corporations would have this effect. But the analysis of such taxes in Chapter XXV will show that they are not very satisfactory. The absence of any standard as to what constitutes a normal profit, the accounting difficulties involved, and the ease with which such taxes can be evaded by the concealment of profits, all interfere with the success of such measures. They may be justified in time of war, when the unusual gains of profiteers provide a fruitful source of revenue to the government, but they are not suitable for incorporation in a permanent tax program. Moreover, they do not get at the real cause of the difficulty It is much more desirable to prevent unearned profits from being made than to tax them away after they have been received.

In many of the earlier chapters of this book we considered steps which might be taken to secure greater stability in business life. Some of these, such as the control of money and credit, government borrowing for public works, and the guaranteed sale of output, are designed to correct the fluctuations of price levels and business cycles Others, such as the development of scientific methods of business management, the integration of industry, the improvement of our marketing organization, and the promotion of friendly relations between employers and employees, are aimed at correcting seasonal variations and the interruptions caused by irregular demand, labor troubles, and the like. All of such improvements, by leading toward the general stabilization of business activity, will reduce excessive profits, as well as losses; for it is out of the dynamic and uncertain changes of industry that pure profits and losses arise. The increasing scope of insurance, which is now providing protection against many losses formerly thought to be non-insurable, will also reduce the irregularities of business gains by pooling the risks of many individuals and spreading them over the whole business world.

Among the most frequent sources of large fortunes are those unfair business practices, such as fake stock deals, wildcat financing, the production

of adulterated or worthless merchandise, and the exaction of monopoly prices, which were described in an earlier paragraph. Many of these undesirable activities are being weeded out by the action of the businessmen themselves through the influence of chambers of commerce, "Better Business Bureaus," trade associations, and the like. There will always be some antisocial persons, however, who can only be restrained by public authority. We must, therefore, rely upon effective governmental regulation. The activities of the Federal Trade Commission in preventing unfair business practices, the control of trusts by this body and by public officials under the authority of the Sherman and Clayton acts, the regulation of railroads and other public utilities by the Interstate Commerce Commission and the public service commissions of our various states, and the control of banking through the machinery of the Federal Reserve System are all steps in this direction. These activities need to be continued and strengthened. We may anticipate that, as government becomes more efficient and its scope is widened, such ill-gotten gains as have figured in the making of large fortunes in the past will in the future be less frequent.

We cannot expect to eliminate all large business profits so long as we retain the fundamental institutions of capitalism, such as free enterprise and competition, but it will be recalled that we are not seeking to abolish all inequality. The principal end which we hope to accomplish is to prevent the larger elements of *unearned* income, and this is not impossible.

The Restriction of Inheritance.—In section A we saw how the institution of inheritance perpetuates inequality in a way that is undesirable. The most practical plan for curtailing this evil is by inheritance taxation. The pros and cons of such taxes will be more fully set forth in Chapter XXV. The argument in their favor is strengthened by what has been said about inheritance above. For the state to appropriate a considerable part of the wealth of a person at death deprives no one of money that he has earned, and it will prevent the perpetuation of inequality from generation to generation and the maintenance of a parasitic class. The only strong argument against it is that it would interfere with the accumulation of capital by discouraging men of ability from amassing a fortune. To this it is sufficient to reply that it is doubtful whether the desire to leave one's wealth to one's descendants is as strong a motive for accumulation as the love of power and prestige. If sufficient capital is not accumulated to meet the needs of industry, the rising interest rate will point out the danger in sufficient time to permit steps to be taken to remedy the deficiency.

If an inheritance tax is to be employed as part of a program for the correction of inequality, it should be steeply progressive. That is, the rate of tax should increase sharply, so that a relatively small percentage is taken from small estates, a high percentage from large estates. Otherwise it will have very little effect in actually breaking up large fortunes. The rates should

increase both with the size of the bequest and with the distance of relationship of the heirs. Such a tax will help to lessen inequality in two ways. By placing heavy taxes upon the rich, it will make possible the reduction of the tax burden borne by the poor; and if the government uses the revenue derived from it in ways that contribute to the general welfare, it increases the real incomes of the masses. It would not be expedient to abolish altogether the institution of inheritance, for a property owner should at least be permitted to provide for the support of surviving dependents. A husband and father assumes an obligation to his family which society should respect. When he marries and places upon his wife the burdens of a family and household, he makes it practically impossible for her to earn her own living, and when he begets children, someone must provide for them during their minority. It is, therefore, entirely appropriate that he should bequeath them enough to maintain the wife in comfort and to provide adequate living and education for the children. More than this, however, they have no right to expect, and to give them more is socially undesirable. Beyond this point, the drastic restriction of inheritance is perfectly justified.

Eugenio Rignano, an Italian economist, has made the unique and interesting suggestion that inheritance taxation should be made progressive, not only as to the size of the estate and the distance of relationship of the heirs, but also as to the number of generations through which the estate has been transmitted. When wealth is passed from father to son, Rignano would tax it moderately, but when it is passed on to a grandson, he would place a much heavier tax upon it. He would permit no bequest at all to a third generation. In addition to this, he proposes that the state should take its share of the inheritance, not in money, but in real property. By so doing, most of the permanent wealth of the country would gradually pass into the government's hands, so that in time there would be ushered in a regime of national ownership, practically amounting to socialism. In fact, the scheme is designed to bring about socialism by gradual steps. Its desirability, therefore, rests upon the desirability of socialism itself. This subject will be dealt with in a later chapter.

Progressive Income Taxation.—Even after the foregoing measures are made effective, considerable inequalities of income will no doubt still prevail. Further equalization can be accomplished by the progressive taxation of personal incomes. The merits of such taxes will be explained more fully in a later chapter. It is enough for the present to point out that a progressive income tax will tend to reduce inequality by appropriating large slices of the larger incomes to the public use, while bearing but lightly upon smaller incomes. The more steep the rate of progression is, the greater will be this effect. Hence, the increasing use of progressive income taxes in our country and elsewhere is helpful toward solving our problem. The taxation of incomes, however, is treating the symptoms of inequality, and not the causes.

It is a less fundamental reform than some of the other measures which have been suggested. We should endeavor to accomplish the prevention, rather than the confiscation, of large incomes.

C. Increasing the Level of Wages

Low Wages and Poverty.—Whereas most of the large incomes of society are derived from land rents and business profits, the low incomes are obtained usually from wages. Hence, the raising of wages will help to correct the evils of inequality from the other end of the income ladder.

Low wages make for low income, but not all poverty is the result of insufficient wages. Poverty is partly due to the occurrence of such misfortunes as unemployment, sickness, accident, and old age, which are to be regarded as interruptions to, rather than insufficiency of, income. For this reason, the measures suggested in earlier chapters for the reduction of unemployment, and for systems of social insurance to meet such contingencies as sickness, accident, and old age, will help to bring about the abolition of poverty. This work will be furthered also by the general improvement in medicine and education which makes for the reduction of disease and ignorance. No small amount of poverty can be attributed to ignorant and unwise use of income, even where the earnings are sufficient and uninterrupted. Hence, the improvement of habits of consumption among the lower working classes will be required.

But even after these causes of poverty have been removed or compensated for—in fact, even after acute poverty has been completely eliminated—there will still be inequality, and some incomes which are undesirably low. The problem of inequality is not so much one of poverty as it is of relative differences. Not only dire want, but the contrast between those who have enormous wealth and those who are only moderately supplied with this world's goods, is to be dealt with. To correct this we must supplement measures to reduce large fortunes and to prevent acute poverty by a general program for increasing rates of wages.

Can High Wages be Maintained by Law?—In Chapter IX we learned that attempts have been made to maintain wages above a minimum level by legal compulsion, and that these attempts have sometimes been successful. It would be a happy solution of our problem if we could solve it merely by passing laws fixing all wages at a level sufficiently high to afford a comfortable living, but correcting the diseases of the social organism is not so simple a matter. It is possible to fix a wage by law and to enforce its payment by employers, provided it does not differ too much from prevailing market rates for the type of labor in question. But in applying such legislation we are confronted with the fact that the demand for labor is elastic; that is, employers find it unprofitable to employ as many workers when

wages are high as when they are low. Higher wages induce them to dispense with certain marginal employees who were just barely worth their hire when wages were lower. They can do this by substituting machinery or labor of a cheaper grade to do the work formerly done by the laborers who are discharged. This is in accordance with the principle that wages are set by the value contributed to the product by the marginal workers of each class. If, by compulsion, we fix a higher wage than that which formerly prevailed, we simply raise the margin and force out of employment those submarginal workers whose contribution is not worth their hire to their employers. For this reason, if high minimum wages are established, they tend to throw out of employment those workers who cannot really earn the wage. The most that laws of this sort can do is to keep wages up to the normal competitive level for unskilled labor in those sweated industries where they have been depressed by the ignorance and inferior bargaining power of the labor employed. Therefore minimum wage legislation, though desirable in such cases, is no solution for the general problem of low wages.

Labor Union Activities to Increase Wages.—Laborers have sought to solve many of their own problems by organizing themselves into unions which deal collectively with their employers. One object of such unions is to force the payment of high wages to their members. A union can coerce its employers into paying higher wages than would otherwise prevail if its organization is strong enough to control the supply of labor in its trade. But, as in the case of minimum wage laws, it has to reckon with the elasticity of demand for labor. At a high wage, employers will not engage as many workers as they will use at lower wages. Hence, the union can maintain its increase only at the expense of providing employment to fewer persons.

There are some cases, of course, where technical conditions make a certain type of labor practically indispensable, and where the demand for the product is so inelastic that the rising price occasioned by the increased wages will not greatly reduce sales. In such a situation a union might maintain higher wages without causing a decline in employment, for the increased wages would come out of the pockets of consumers. Likewise where the employer has a monopoly of his product, if certain of his workers are so indispensable that he cannot reduce their numbers, they can force the payment of higher wages at the expense of monopoly profits. Other exceptions to the above stated principle may be found, but it is the judgment of the present writers that labor union demands for increases in pay will not be effective in raising the real wages of labor in industry at large.

Further, it seems that union policies designed to maintain unduly high wages are bound to break down sooner or later if there are many unemployed workers in the affected trade clamoring for positions. The successful maintenance of high wages is only possible to such unions as maintain a labor monopoly and restrict the number of workmen admitted to their trade.

They do this by rules limiting the number of apprentices admitted in any one year, by prohibitive initiation fees which keep out new members, and by similar means. This is no remedy for low wages throughout the field of industry, for if wages are kept up in one trade by an artificially created scarcity of workmen, more persons are forced into some other employment, thereby depressing wages there. Moreover, labor unions are strongest among those skilled and intelligent workmen who are already obtaining fairly good wages. They do not usually reach the unskilled classes whose earnings are most in need of increase.

This is not to say that unions can never have any beneficial effects upon wages. It was shown in the last chapter that union resistance to adverse wage influences can sometimes prevent wages from being depressed below their normal level, a circumstance which might occur occasionally in the absence of union activity. Likewise, unions, by insisting on substantially uniform wage rates throughout a trade, can force wages in isolated areas or submarginal plants up to the levels which prevail elsewhere, thereby assisting the force of competition in maintaining equality of earnings throughout a competing group. Labor unions can also offset the tendency of wages to be sluggish in responding to increasing demand or growing scarcity. And they can tide labor over periods of interrupted earnings occasioned by unemployment, accident, or sickness, by providing benefits which are in the nature of insurance funds. However, none of these are remedies for the broad problem of low wages. Besides, these beneficial results are partly offset by union resistance to occasional wage reductions which may be needed to put the labor market in balance with other factors in the economy.

Although the solution of the general wage problem cannot be attained by direct union action, unions can help indirectly towards a solution by encouraging industrial policies and legislation constructively designed to improve the position of labor. When they can, if they will, use their influence to increase the efficiency of labor in industry and to stimulate employers to increased efficiency of management which, by promoting increased production, will raise the real wages of labor along with all other forms of income. Finally, if they would encourage a reduction in the supply of labor, by fostering high standards of living and small families among the workers, they could promote an increase in the share of total income that goes to labor.

Increasing the Supply of Scarce Productive Agents.—In one sense, each factor of production constitutes a demand for the others which are employed in combination with it. For example, a large supply of labor requires much land and equipment for its effective employment. So, if labor is relatively plentiful, the owners of land and equipment will be well paid in comparison with labor. On the other hand, a large supply of land and equipment cannot be utilized effectively without laborers to work it, so that wages will be proportionately higher if land and equipment are abundant. If there are many

skilled laborers, more unskilled men will be needed to assist them. On the other hand, when unskilled workers are abundant, there is a demand for skilled men with which to make their labor more effective.

An exception to this principle exists where one factor of production can be used as a substitute for another. In so far as new investment takes the form of labor-saving machinery, for instance, it tends to decrease, rather than increase, the demand for labor. This does not mean that the introduction of machinery will cause permanent unemployment, but it may reduce the *value* of labor, in relation to that of capital. Most of the evidence goes to show, however, that effects of this kind are not the general rule. A general increase of equipment or land is pretty sure to result in raising the demand for, and hence the wages of, labor. The supply of land cannot be very greatly increased, but something can be done along this line by reclamation projects, such as the drainage of swamps and the irrigation of deserts. The supply of equipment can be substantially increased by additional investment. Hence, the encouragement of saving and investment is advantageous to labor The wages of unskilled labor, which are most in need of increase, can be improved by increasing the number of skilled, in relation to unskilled, workers

The Control of Population Growth. Eugenics.—The most fundamental and direct method of increasing the share of labor is to bring about its greater scarcity It is the excessive numbers of people, especially in the lower noncompeting groups, that is the most persistent cause of low wages This brings us back to the general problems of population growth which were discussed in Chapter XII. We there pointed out the desirability of maintaining the number of people at the optimum level and of checking the birth rate among the lower classes of society The attainment of these objectives would do a great deal to improve the incomes of labor in general, and of poorly paid labor in particular. One measure suggested for accomplishing this was the restriction of immigration. The annual coming to our shores of millions of immigrants prior to the First World War was a cause for low wages among unskilled labor. It was directly encouraged by employers, who desired a supply of cheap labor for their operations. We have finally corrected this by the present immigration laws, which drastically cut down the number of foreigners who are annually admitted This should prove one factor making for an increase of wages for unskilled labor. It should be supplemented by a reduction in the birth rate among the poorer classes of society. The progress of eugenics, which seeks to encourage the growth of numbers among the superior stocks of our population and to discourage it among those which are inferior, if it can be made effective, will have a general leveling effect upon wages, preventing the depression of earnings now caused by the excess of numbers in the lower strata.

The Influence of Education and Other Improvements in the Environment.—Since the stratification of society into noncompeting groups is not

due solely to biological factors, the uneven distribution of numbers among these groups can be partly corrected by changes in the environment which increase the opportunities for advancement open to members of the more poorly paid classes. The wider diffusion of education is probably the most hopeful measure of this sort. Without education one is likely to be limited to unskilled occupations. With education he is able to find more remunerative employment. The general effect of more widespread schooling is to increase the ranks of skilled workmen and to decrease the numbers of people capable only of cruder manual work. This tends somewhat to reduce the wages of the former and raise the wages of the latter. Many persons feel, however, that the curriculum commonly prevailing in our school system is not well adapted to accomplish this purpose. It is advocated that there should be more vocational training, which will equip the students to earn a living at some skilled trade. An increasing measure of attention to this problem is being paid by school authorities, and more of this type of education is coming into vogue.

Finally, most general measures of social reform are likely, directly or indirectly, to raise the wages of labor. The elimination of the slums in our cities, the improvement of home conditions through clubs and settlement houses, the promotion of better health—all such work tends to raise the quality of our people, both morally and physically, thereby equipping them for a higher type of employment. This tends to lessen the ranks of those unskilled, incompetent workmen whose earnings are deplorably low.

Summary

The most fundamental and general causes of inequality are differences in the hereditary abilities of individuals and in the opportunities afforded by their environments. More specifically, great fortunes are derived mainly from increasing land rents and from business profits, largely of an unearned sort. The accumulation of such fortunes is facilitated by the intangible nature of much modern property, and it is perpetuated by the inheritance of wealth. Small incomes, on the other hand, result from low wages, due to the abundance of labor, especially among the unskilled.

Single Taxers propose to abolish poverty by taxing away the rent of land, but they exaggerate the importance of land rent, and the immediate adoption of their program would be unjust to those who acquired land by purchase. Unearned fortunes derived from land can be reduced by a more moderate program which would gradually increase the taxation of land. Excessive and unearned profits can be lessened by measures of business stabilization, monopoly control, and the regulation of business practices. Inheritance should be restricted by steeply progressive inheritance taxes. Any remaining inequality can be further reduced by progressive income taxation.

Low wages, as distinguished from poverty, cannot be corrected by minimum wage laws, except in sweated industries, for such laws tend to force into unemployment those who cannot earn the wage. Labor unions can ordinarily force an increase in wages only by restrictive labor monopolies, which cause depression of wages elsewhere, but they can prevent inequalities resulting from lack of mobility and competition in the labor market, and they can foster general increase in productive efficiency. Increasing the quantity of land by reclamation, and of equipment by the investment of savings, will tend to raise the share of labor. The restriction of population growth, especially among unskilled workers, by the curtailment of immigration, by reduction of the birth rate among the poorer classes, and by eugenic measures generally, will help to raise and equalize wages. Increasing education and general measures of social reform, by equipping labor for work of a higher type, also have this effect.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

Two brief surveys of the nature and causes of inequality are to be found in F. W. Taussig's *Principles of Economics* (fourth edition, 1939), Chapters LVI and LVII, and L. D Edie's *Economics Principles and Problems* (1926), Chapter XXIII. Edwin Cannan's analysis of inequality in the incomes from property and from work, in Chapters XI, XII, and XIII of his *Wealth* (1914), is both original and suggestive For an account of how our great fortunes have been made, one of the following should be consulted J W Jenks, *Great Fortunes The Winning, the Using* (1906), A Youngman, *The Economic Causes of Great Fortunes* (1909); G. P Watkins, *The Growth of Large Fortunes* (1907); Gustavus Myers, *History of the Great American Fortunes* (1911); and F. Lundberg, *America's Sixty Families* (1937).

The above books are rather lacking in suggestions for the correction of inequality H. Dalton, in his *Some Aspects of the Inequality of Incomes in Modern Communities* (1920), makes such suggestions, stressing the reform of inheritance laws. Henry George's *Progress and Poverty* (1879) is at once the oldest and the best presentation of the Single Tax doctrine More conservative is the program of T N. Carver for increasing the supply of capital and decreasing that of labor, as set forth in his *Essays in Social Justice* (1915), Chapters XIV and XV. His discussion of Single Tax, inheritance and monopoly in Chapters XI to XIII is also appropriate A brief treatment of the problem of poverty, as distinguished from inequality, is contained in J. H. Hollander's *The Abolition of Poverty* (1914). Part V of A C. Pigou's *Economics of Welfare* (1920) treats of some measures for the correction of inequality which are not often dealt with, but they are palliatives rather than measures of constructive reform, and the discussion is somewhat ponderous.

PART VIII

PUBLIC FINANCE

CHAPTER XXIV

Public Expenditures and Principles of Taxation

A. The Expanding Area of Public Finance and the Growth of Public Expenditures

The Field of Public Finance.—The conduct of government in peace or in war necessitates the raising of funds and the expenditure of those funds in the pursuit of a wide variety of objectives. The study of this raising and spending of funds by a government to finance its varied activities is known as public finance. Government income is obtained from various sources, chiefly by means of taxation and public borrowing. The expenditures are directed towards the satisfaction of the collective wants of the members of society, rather than the individual wants of the citizen.

Revenue is required first of all to meet what might be called the basic or minimum activities of the state—maintaining law and order, administering justice, controlling relations with other sovereign nations—but these functions absorb a very small portion of total governmental outlays today. We have already studied in previous chapters the manner in which our individual wants are satisfied through the mechanism of the market. The forces of demand and supply operate through a price system which allows each individual to arrange his personal expenditures in accordance with prevailing prices and his personal judgment of the relative importance of the goods that are offered for sale. But people nowadays have many extremely important wants that cannot be priced and purchased through the market mechanism. If one's city is dirty and smoke enshrouded, it is impossible for a single individual to purchase immunity from dirt and smoke for his family. Or if a citizen desires protection for his family from disease growing out of unsanitary living conditions, he cannot purchase personal protection in the free market. Such wants as these may rank very high in one's scale of preferences (much higher than a new coat or a finer cut of beef), but their satisfaction depends upon collective action. If all income had to be spent in the free market, such collective wants could never be satisfied. Collective action is secured through political devices; therefore the government must raise funds to pay for smoke abatement, sanitation, education, roads, bridges, police protection, parks, and similar costly activities.

The number of collective wants has been growing with great rapidity as modern civilization evolves into an increasingly complex society. The

people now demand mass insurance against old age, unemployment, accident, and bad health—and this is not all. The extension of governmental responsibility has reached a point where many authorities demand that the government now assume the gigantic task of maintaining economic stability and full employment.

Controversy Over the Scope of Public Finance.—In the nineteenth century it was generally held by political scientists and economists that the activities of government should be kept at a minimum, the processes of economic life should be left to individual initiative under the regulatory influence of competition. The economists of that period reasoned that governmental activities were unproductive and that public expenditures should therefore be kept as low as possible. Taxes were, at best, a necessary evil, and the best tax system was the one which taxed the least. It was further held that taxing, borrowing, and spending by the government should be restricted to what is absolutely necessary to finance those operations of government which are indispensable; they should not be used as instruments of control over the economic process. It was recognized that the financial operations of the government will have some effects upon such matters as production and the distribution of income, for if a tax is placed on a manufactured commodity, it will affect the price of that commodity, and if a tax is levied against an individual, it will take some of his income away from him Because of this, it was admitted that careful attention should be given to all the economic consequences to be expected from any particular tax before deciding to impose it, but these indirect effects are not the purpose for which the tax should be levied—its objective should be merely to raise revenue.

Furthermore, it was believed that a government, like an individual, should not go into debt if it could possibly be avoided, it should balance its budget so that its receipts from taxes, fees, and so forth will always equal its expenditures.

With the passing of the years this attitude is changing. Government is coming to be recognized as a positive force in the economic world, and it is exercising more and more measures of control over various economic activities. The earlier chapters of this book have given many illustrations of these controls At the same time, economists have changed their ideas concerning the unproductiveness of public activity. Production is now defined as the creation of utilities, and *any* activity, either public or private, that adds to the flow of utilities is therefore productive. Along with this trend toward expanding the functions of government, there is discernible a tendency toward a new conception of the scope and objectives of public finance. Recognizing that methods of raising and spending the public moneys may have important effects upon the economic process as a whole, a number of authorities are now arguing that public finance should no longer be concerned merely with raising the moneys that are necessary to support the

expenditures of government, but that the whole business of taxing, borrowing, and spending by the state should be directed consciously toward controlling the economy, and especially toward combating business depressions and maintaining full employment. We have already paid some attention to this view in the chapters entitled "The Problem of Unemployment" and "Economic Fluctuations" earlier in this book. One of the most ardent proponents of the new view, Professor Alvin Hansen, states "It is sound policy to control public expenditure, taxation, and borrowing so as to promote economic stability and continuously high levels of business activity and full employment."[1] Professor A. P. Lerner even takes the position, "The purpose of taxation is never to raise money, but to leave less in the hands of the taxpayer" and "the purpose of borrowing is not to raise money, but to make the public hold more bonds and less money."[2] In the new view it is no longer held to be necessary for the government to balance its budget; it should borrow freely when necessary to keep the total volume of expenditures in the economy at a level sufficient to provide full employment. As one authority puts it, "Today budgets may be unbalanced on principle."[3] "The issue is not restricted to public debt policy. It is a question of the relation of government finance to the whole economy. . . ."[4] In the opinion of these writers, maintaining full employment and preventing inflation are no longer to be looked upon as secondary objectives of fiscal policy; they should be regarded as the primary aim of all government finance. If this view is to prevail, public finance must be defined somewhat more broadly than it was at the beginning of this chapter; that is, it now becomes the study of the raising and spending of government revenues to finance the activities of government and to provide a mechanism of positive control over the economy.

These ideas have developed a sharp controversy among economists, political scientists, and authorities on public finance. The older view, that governmental expenditures should be restricted, and above all that the government should be kept as free as possible from debt, is still held by many, but a trend toward increasing acceptance of the new philosophy is evident. Since the core of this philosophy is concerned primarily with the administration of the public debt, we shall defer a fuller consideration of it to the chapter, "Public Borrowing and Fiscal Policy." Meanwhile, the student will do well to keep in mind the changing objectives of government finance policy as he proceeds with this and the following two chapters.

The Growth of Public Expenditures.—An examination of our governmental expenditures gives striking evidence of the importance of public

[1] Alvin H. Hansen, *State and Local Finance in the National Economy* (1944), p. 285.
[2] Abba P. Lerner, *The Economics of Control* (1944), pp. 307-308.
[3] Mabel Newcomer, *Taxation and Fiscal Policy* (1940), p. 64.
[4] *Ibid.*, p. 12.

finance, and hence of the need for basing it on sound policies. In 1943 the expenditures of the federal government totaled $79,604,000,000; those of the state governments were $3,503,000,000, and local governments spent $4,828,000,000.[5] These figures give a grand total of $87,935,000,000, or about $656 per capita. Since the aggregate national income for that year was approximately $149,400,000,000, something like 59 per cent of the national income passed through government hands. These spectacular expenditures were due chiefly to our participation in the Second World War, but even prior to this conflict there had been a fairly constant increase in the expenditures of our federal government. This is shown by the figures in the table below. Note that in the decade following the First World War federal

THE GROWTH OF FEDERAL EXPENDITURES IN SELECTED YEARS

Year	Total ordinary federal expenditures*	Per capita ordinary federal expenditures**	Total estimated national income of U. S. *** (000,000 omitted)	Total estimated national income per capita	Ratio of per capita expenditures to per capita national income (per cent)
1850	$ 39,543,492	$ 1.71	$ 2,214	$ 95	1.80
1860	63,130,598	2.01	3,636	116	1.73
1870	309,653,501	8.03	6,720	174	4.6
1880	267,642,958	5.34	7,391	147	3.63
1890	318,040,711	5.05	12,082	192	2.63
1900	520,860,847	6.85	17,965	236	2.90
1910	693,617,065	7.52	30,530	332	2.26
1917	1,977,681,751	20.24	53,200	521	3.88
1918	12,696,702,471	132.39	60,200	581	22.78
1919	18,413,879,955	180.75	67,400	642	28.15
1920	6,403,343,841	58.10	74,300	697	8.33
1930	3,440,268,884	28.02	70,300	571	4.91
1932	4,535,147,138	36.33	39,963	320	11.35
1934	6,011,083,254	47.56	49,455	391	12.16
1938	7,238,822,158	55.76	64,200	494	11.28
1940	8,998,189,706	68.19	77,809	589	11.57
1941	12,710,629,824	95.52	95,618	718	13.30
1942	32,396,585,098	242.18	119,791	895	27.05
1943	78,178,885,241	583.67	149,400	1,115	52.34
1944	93,743,513,214	707.16	160,700	1,212	58.34

* Data from United States Treasury, *Annual Report for Fiscal Year ending June 1944*, pp 527-531 Figures here given do not include expenditures for public debt retirement or postal service, except deficits Relief expenditures from 1932 to 1937 are included

** Population for noncensus years estimated.

*** For sources of data on national income from 1850 to 1917, see *Supra*, Chapter I Data for 1917-1942 from United States Department of Commerce, *Statistical Abstract of the United States 1943*, Table 422 National Income data for 1943 and 1944 from National Industrial Conference Board, *The Economic Almanac for 1945-46*, p 70.

[5] National Industrial Conference Board, *The World's Biggest Business, 1914-1944*.

expenditures dropped sharply, but in the depression years of the 1930's they increased to about two and one-half times the figures for 1930. The same upward trend is also observable in the case of state and local governments. State expenditures, which totalled only about four hundred million dollars in 1914, had risen to over three and a half billion in the early 1940's. Municipal government expenses in the same period rose from one billion nine hundred and thirty million to about five billion. It is reasonable to suppose that this general upward trend will be continued in the future.

Causes of the Growth in Public Expenditures.—It has already been pointed out that the greatest factor in this increase in governmental expenditures has been war. Wars not only bring direct outlays for such things as the purchase of munitions, but they also give rise to indirect costs, such as pensions, veterans' insurance, hospital care, and governmental activities for combating the depressions that seem to be the inevitable legacy of wars. Professor Groves has estimated that public expenditures during the First World War (1917-1921) exceeded by over 50 per cent *all* federal expenditures from the administration of George Washington to that of Woodrow Wilson.[6] This remarkable conclusion is dwarfed by the fact that the total of federal expenditures in the year 1944 (during the Second World War) was nearly three times that of the years 1917, 1918, and 1919 combined.

Waiving war expenditures and considering only other federal, state, and local outlays, the secular trend remains sharply upward. The reasons are to be found in the continual growth of the functions of government—intensively, by the expansion of duties already established, and extensively, by the assumption of entirely new functions. Examples of the expansion of existing functions are furnished by the growth of public education, irrigation projects, and the network of new hard roads. The increasing concentration of population in urban areas has also been a factor. Writers frequently assert that public expenditures observe a law of increasing costs in that, the larger the urban area, the greater the per capita expenditure necessary to maintain almost every activity of the local government. Fire protection, health and safety, police protection, street building, and the like, all grow at a progressive rate as a town or city grows in size.

However, it is in the assumption of new functions, especially by the federal government, that the chief cause of the peacetime growth of public expenditures is to be found. The discerning reader has no doubt found in the problems discussed in this book repeated illustrations of this trend. Much of it came to a head during the hard years of depression in the 1930's. The primary new factors were expenditures for public relief, public works, and bonus payments. This extensive expansion into new areas appears destined to continue. To the customary regulatory oversight of business, such as food and factory inspection, monopoly and banking control, have been added a

[6] Harold M. Groves, *Financing Government* (1945), p. 468.

long list of new state and federal commissions and corporations. The United States Shipping Board, Bureau for Vocational Education, Bureau of the Budget, Grain Futures Administration, Federal Power Commission, Federal Oil Conservation Board, Federal Farm Board, Federal Radio Commission, Reconstruction Finance Corporation, Civilian Conservation Corps, Home Owners Loan Corporation, Securities and Exchange Commission, Tennessee Valley Authority, Rural Electrification Administration, and the Social Security Board are typical examples of a long, diverse list of agencies established *prior* to the new agencies that arose out of the Second World War. And this trend can be matched (and exceeded) by other countries within the orbit of western civilization. The drift reached its most extreme limits in fascist countries and in the Soviet Union.

If the scope of governmental activities is to go on expanding to meet new social and economic obligations, public expenditures must increase correspondingly, necessitating the raising of ever more and more revenue. A large part of the required funds for this expansion in the past two or three decades has been obtained by public borrowing. It is at this point that the controversy over what constitutes good public financial policy reaches its climax.

The Economic Effects of Public Expenditures.—Even when the spending of money by the state is not directed consciously toward control of the economy, the large fraction of the national income that is received and spent by the various governmental units is bound to have a powerful influence on the economic life of the nation. The guidance of production, prices of commodities, and prices of the agents of production must all be substantially affected. Every citizen must contribute toward the maintenance of parks, schools, roads, and other collective goods, regardless of his personal inclination So, a part of his income is removed from his immediate control. Industry is at the same time diverted into channels very different from those which it might otherwise have followed. The impact on the price system is greatest (and most acutely understood by the consumer) when sharp changes are made in the volume of public expenditures over a short period of time, as, for example, with the advent of a major war. An army requires not only guns and bullets, but also food, clothing, and shelter. Private citizens, desiring commodities needed by the government, must pay prices equal to those the government offers. As pointed out in an earlier chapter, the resulting competition gives rise to wartime price control by public authorities in order to prevent inflation.

The pricing and apportionment of the agents of production are affected by government expenditures in a similar manner. The principle of opportunity costs is at work Wages of labor, for example, increase in wartime, not only because the withdrawal of men into the armed forces tends to reduce the supply of workers, but also because of the bidding for labor by

expanding war industries. A furniture factory or department store must compete with shipyards and munition plants for available labor. The result is a reallocation of the labor force and sharp changes in wages. Some civilian industries find rising labor costs prohibitive, and are forced into bankruptcy. Others curtail output, and many meet the situation by converting to war production. It is this scramble for scarce agents that necessitates the production controls of wartime; agents must be allocated so that the war effort is not impeded. The return of peace reverses the entire process; the advantage in competition for the scarce labor shifts to peacetime production. Every agent of production is affected in a more or less similar manner.

In peacetime the economic influences of government expenditures are less striking, yet they are certainly in operation. New government expenditures enter the market in competition with private expenditures, and the price system must make the necessary adjustments. The end result is a redistribution of both production and individual incomes. Collective wants are satisfied in an increasing number and (assuming no increase in the national income) at the expense of individual wants. Certain industries gain relatively to others. Individuals find their relative shares of the social income altered as they give up more or less money in taxes to the government and share more or less in the collective goods that the government provides. It takes very little imagination to appreciate the all-pervasiveness of these shifts, and the student can readily understand why the size and direction of public expenditures lead to intense political controversy.

The Budget System.—The best check upon the fiscal administration of a government is the adoption of a budget system. A budget is a detailed estimate of the financial operations of a government for a stated period of time, prepared in advance by designated officials. "Thus, the budget may be spoken of as being prepared, as being voted or ratified, as being executed, as being audited and controlled. It goes through all these stages."[7] The adoption of a budget system places the government on a planned financial basis. It is the only satisfactory way of knowing in advance the needs of government and the resources available to satisfy them. It reduces political bickering, by requiring the various departments to make their requests for appropriations to the budget officials instead of directly to the legislative body. Usually the budget official is responsible to the executive branch of the government, thereby securing executive responsibility. Publicity is attained; each department must announce its request for funds openly in advance and defend it before the budget authorities. The final form of the budget must be approved by the appropriate legislative body, and it is then the duty of the administrative officers to carry out the accepted program.

Every state in the American union has a budget system of some kind, usually with the governor as an important, if not a controlling, factor. An

[7] Charles W. Collins, *The National Budget System and American Finance* (1917), p. 1.

act of Congress established the national budget system for the federal government in 1921. Under this law a budget bureau was established, charged with the duty of preparing a federal budget, to be transmitted by the President of the United States to Congress. All departments make their requests to the bureau for the inclusion of their appropriations in the budget. Final authority, however, rests with Congress, since the Constitution gives Congress the sole power to raise revenue and make appropriations. Congress can make extensive alterations in the budget recommended for approval, and can subsequently pass additional specific appropriations of its own. The President may veto the bill that finally emerges from Congress, but this power is considerably weakened by the fact that he lacks the legal authority to veto specific items; he must accept or veto the budget as a whole. This makes possible the addition by Congress of "riders," in the form of amendments to the budget, and leaves the President helpless to prevent undesirable changes without placing the entire budget in jeopardy. The lack of concentration of responsibility seriously weakens budget control and can lead to a deadlock between the executive and legislative branches of the government. However, operation of the federal budget has been reasonably successful; it certainly constitutes a marked improvement in efficient federal financial planning, as compared with the haphazard methods of federal finance that formerly prevailed.

An attempt to tighten federal budget control was incorporated in the Legislative Reorganization Act of 1946. It has long been the practice in Congress for the revenue and appropriation bills to be prepared in separate committees. Each committee functioned without reference to or consultation with the other. The objectives of a budget can easily be lost under such a procedure. The 1946 law provides that the revenue raising and the appropriation committees of each house shall meet jointly at the beginning of each session and fix the estimated over-all limit for expenditures and receipts for the coming fiscal year. If the joint committees of the two houses fail to set the same limits, a conference committee representing both houses must compromise the differences. If the estimated total appropriations exceed estimated receipts, then a concurrent resolution must be passed authorizing an increase in the federal public debt. It is doubtful whether any such limitations upon the power to appropriate and tax can ever be effective in practice. The first trial of the new technique in the winter and spring of 1947 proved unimpressive. The two houses of Congress set different limits and the conference committee was unable to reach an agreement. Meanwhile, appropriation bills and revenue bills were prepared and acted upon with complete disregard for the new procedure.

B. General Principles of Taxation

Sources of Public Revenue.—Modern governments receive their incomes from a wide variety of sources. Chief among these sources are taxation, fees, licenses, and the earnings of public enterprises.

A *tax* is a compulsory payment levied by a governmental authority without regard to the specific benefits the taxpayer may receive. When individuals receive specific benefits (e.g. birth certificates), a fee can be charged for that service, but most of the services which a government renders to its citizens benefit all of them in general rather than certain ones in particular. The services of most public officials, and of the army, the navy, the police, the fire departments, and similar public agencies, are rendered to all collectively. Consequently, everyone who is able to do so may be required to contribute towards the support of these activities. The right to tax, that is to extract compulsory payments without regard to the amount of specific benefit received, is one of the essential attributes of the sovereignty of a government.

Taxes may be roughly divided into three classes: personal taxes, property taxes, and special business taxes. Personal taxes are illustrated by income, inheritance, and profits taxation. Property taxes are illustrated by levies on such things as real estate, mortgages, and tobacco. Business taxes are illustrated by capital-stock taxes, incorporation fees, and chain-store taxes graduated according to the number of stores.

A *fee* is a charge made by a governmental agency for the performance of some service which, while socially a desirable act, at the same time confers a special benefit on the individual from whom it is collected. The individual concerned pays the cost of rendering the service, in whole or in part. For example, while it is socially desirable that all marriages be carefully recorded, at the same time a special benefit is thereby conferred upon the parties affected. The recording of their marriage gives it legal status. A fee is therefore charged for the service. Other examples are fees charged for the recording of deeds, mortgages, and contracts. Fees to cover costs of service are increasing in cities, and are very useful in such cases as public golf courses, tennis courts, parking fields, and the like. One of the most important types of fee is the special assessment. Public improvements sometimes convey special benefits to individuals owning property near the improvements, and in some localities it is customary, under such conditions, to ask the owners to contribute towards the cost of making the improvement. When a street is built, with sidewalks, curbs, and sewers, the improvements benefit not only the city in general, but also, and more especially, the owners of property along the street. Therefore, the property owners can justly be required to pay part of the cost of building it. Special assessments are becoming more common in the United States. Their use should be encour-

aged and extended, for where special benefits are rendered by the state to particular individuals, it is entirely proper that they should pay for them

The line of demarcation between fees and *licenses,* which are legal permits to do certain things, is sometimes very difficult to draw. In many states the distinction is a purely arbitrary matter of accounting.

Revenues from public enterprises are the natural result of the entrance of governments into industry. The conduct and operation of industry is usually left to private persons, but the increasing number of exceptions to this rule is one of the major developments in modern economic life Governments own property, and enter actively into commercial business Medieval monarchs depended almost entirely upon public property and public enterprises for their revenue, but the Industrial Revolution and its accompanying policy of noninterference in industry forced governments to devise new sources of income.

The federal government of the United States received its first great experience in public enterprise as owner of the vast public domain While considerable revenue was obtained, the story of the administration of the various land acts is not a happy page in our history. Today the federal government owns such property as the Panama Canal, the post office system, the Tennessee Valley power project, forest reserves, and a small railroad in Alaska However, it is the entrance of municipalities into the public utility field that furnishes the most important source of public revenue from public enterprise Municipalities own docks, wharves, bridges, streetcar lines, water supply systems, gas and electric companies, airports, and many other installations Here the field of public finance merges with broad issues of economic policy that are discussed elsewhere in this volume.

Justice and Efficiency in Taxation.—A system of taxation that treats the citizens of a nation unjustly is a source of grave danger, for it may lead to explosive discontent The tax structure should be framed so that it will be fair to all the various groups that make up the population A good tax is one that is socially expedient, efficient in its administration, and just in the way in which it distributes the burden of taxation among the citizens upon whom it is levied

Even though a tax is intended merely to raise revenue, social expediency must be considered because, as has been stated, the tax is bound to affect the social welfare of the citizens who must pay it. Certain types of income taxes tend to reduce the inequality of incomes. Taxes on luxuries tend to discourage their consumption, while low taxes on land and buildings tend to encourage individual home owning Exemptions granted to individuals supporting dependents are justified on the ground of public interest. We have already noted above that frequently the purpose of a tax, in the minds of its advocates, is to remedy social maladjustments or effect control of the

economy rather than to obtain revenue, but these aims should be clearly distinguished and separately evaluated before any tax is adopted.

Administratively, to be good a tax should possess the following features: (1) It should be certain as to the time and manner of payment. The taxpayer has a right to know definitely in advance when his tax is due and how it must be paid. (2) It should be collected in a convenient manner. (3) The expense of collection should not be excessive. The collection of some taxes requires such an elaborate staff of officials that the proceeds are not worth the effort involved.

Theories of Justice in Taxation.—Attempts to set up just standards for the levying of taxes have brought forth many interesting theories. The three most widely held are the benefit theory, the equal sacrifice theory, and the ability to pay (or faculty) theory.

The benefit theory states that a government confers numerous benefits on its citizens, and the tax burden should be so distributed that each citizen pays in proportion to the benefits he individually receives. The difficulty with this theory is the impossibility of measuring the benefit which each person derives from the services of the government. To illustrate, how can the advantage enjoyed by different individual citizens from the army and the navy be separated and evaluated? In some cases where the services of the government do lead to directly measurable benefit, as, for example, in the maintenance of almshouses, poor farms, free medical and dental service, the individuals receiving the services are too poor to contribute much, if anything, to the government's support. In other cases, such as the public schools, the people who need the service most would be denied it (again because of their poverty) if they had to pay their full share of its costs. For these reasons the benefit principle is best restricted to small fees (such as for recording deeds), and to special assessments (e.g. for sewers) that are well within the means of the taxpayers. Certainly it would be neither wise nor feasible to base the whole tax system on the benefit principle.

The equal sacrifice theory states that taxes should be so levied that the sacrifice imposed on each person will be equalized. The less the sacrifice felt by the taxpayer, the greater the tax to be paid. Here again we are confronted with the difficulty of measurement, for how can one tell just what is the burden suffered by an individual when he is making payment of taxes? Even two individuals having exactly the same incomes would not necessarily feel the same burden from paying identical taxes. Sacrifice would vary with differences in education, training, occupation, number of dependents, temperament, and similar factors difficult of evaluation.

The ability-to-pay (or faculty) theory states that, since all citizens receive in the protection of life, liberty, and property more than they can ever repay the government, the only just form of taxation is one requiring every citizen to contribute in proportion to his ability to do so. This is the theory

most widely held at the present time, and it gives the most workable basis for the building of a scientific tax system. However, the difficulty of measurement remains in a modified form. When life was simple and wealth was principally of a material sort, this theory could be followed with relatively little difficulty, but under modern conditions the problem is rather complex. What test of ability to pay should be used,—the amount of property a man owns, or the income he receives? If property is taken as the basis, persons holding material wealth that cannot be hidden, such as land, buildings, and cattle, will be taxed more heavily than those who own stocks, bonds, mortgages, and similar intangible property that can be easily concealed. If income is taken as the basis, the question of what constitutes income, and how it can be measured, arises.

Proportional, Progressive, and Regressive Taxation.—Once the basis for taxation has been accepted, the question of determining the rate of tax must be settled. Does the ability-to-pay principle require that taxes should be proportionate or progressive? If Smith has an income of $2,000 a year and Jones an income of $6,000, a proportionate tax of five per cent would mean that Smith would pay $100 and Jones three times that amount, or $300. Each would pay the same proportion of his income. But many persons believe that when a poor man pays five per cent of his income, his burden is far greater than that of a rich man in paying a like percentage. A poor man spends most of his income for food, clothing, rent, and other necessities of life; but the bulk of the rich man's income is spent for luxuries, or is added to his savings. Surely he can part with some of his surplus with less loss of satisfaction than the poor man would suffer in giving up a part of his necessities. A progressive tax might therefore be more just. In such a tax the rate, or percentage, increases (i.e., progresses) as the taxpayer's income, or wealth, increases in amount. Smith might be charged five per cent and Jones eight per cent. The following table will illustrate the difference between proportional and progressive taxation. It assumes seven different incomes which are to be taxed.

Income	*Proportional Taxation*		*Progressive Taxation*	
	Rate	*Amount*	*Rate*	*Amount*
$2,000	5%	$ 100	5%	$ 100
4,000	5%	200	6%	240
6,000	5%	300	7%	420
8,000	5%	400	8%	640
10,000	5%	500	9%	900
15,000	5%	750	10%	1,500
20,000	5%	1,000	11%	2,200

Just how progressive a tax should be it is difficult to say, but the principle has been accepted and put into practice throughout the world. There is no

definite rule of action to be followed; we can only hope that the wisdom of lawmakers, tempered by the publicity given their decisions, will result in a workable approximation of justice.

Some tax rates are regressive, rather than progressive. The greater the income or wealth, the lower the rate actually paid by the taxpayer. Taxes are seldom consciously made regressive, but proportionate taxes have a tendency to operate in a regressive manner under certain circumstances. Thus, most of the wealth of small property owners is usually tangible property in the form of real estate, while the more well-to-do have a larger proportion of their wealth in the form of intangible securities. Evasion, so easy in the latter case, tends to make the tax on property regressive. Also, assessors appraising the property of wealthy individuals frequently lack the ability to make a fair appraisal and tend to underestimate the value of larger holdings. General sales taxes on commodities sold at retail, though proportionate in form (e.g. one per cent of the value of all goods sold), are really regressive in effect, because the poor spend a larger proportion of their incomes for commodities than do the rich (who usually save a considerable part of their revenues); hence the taxes take a larger percentage of the incomes of the poor than of the well-to-do.

The Shifting, Incidence, and General Effects of Taxation.—The person who pays a tax in the first instance does not necessarily assume the final burden of it; he may reimburse himself by collecting the amount of the tax from someone else. This is called *shifting* the tax. Thus, the United States tax placed upon each package of cigarettes manufactured is levied with full knowledge that the manufacturer will add the tax to the price at which he sells his product. The *incidence* of a tax refers to its final resting place. The person on whom the final burden of the tax falls (further shifting being impossible) is said to bear the incidence. The *general effects* of the tax include the numerous direct and indirect consequences not covered by the terms shifting and incidence. For example, a heavy tax on cigarettes might cause the average citizen to rearrange his scale of preferences as between cigarettes, candy, liquor, and the theater. This would alter the demand for labor and other agents in the industries concerned, and would have additional repercussions elsewhere in the economy. The distinction between incidence and general effects is often difficult to discern; an increase in demand for candy and a decrease in demand for cigarettes, caused by a cigarette tax, must affect the ability of the cigarette manufacturers to shift the money costs of the tax to cigarette buyers. Should we call such a result a general effect of the tax, or a division of the incidence burden? Since candy may rise in price as a result of the increased demand for it, has part of the cigarette tax been shifted to consumers of candy? Notwithstanding this difficulty, the terminology is useful if the student desires to carry his analysis of a specific tax beyond the more immediate monetary results into the broader

economic and social consequences. And when tax policy is intended to influence business incentives, to control the consumption of luxuries, or to encourage ~~or discourage~~ saving, etc., it is the general effects, rather than the incidence, that are significant.

Direct and Indirect Taxes.—The theory of the shifting and incidence of taxes is one of the most difficult in the entire field of economics. It is much too complicated to be covered in detail in this book, but we may consider a few of the broad principles involved. It is convenient to classify taxes into two categories: shiftable and nonshiftable. Those which are nonshiftable are called direct taxes because the burden falls directly on the person from whom the tax is collected. Shiftable taxes are called indirect because their burden is automatically transferred to some person other than the one from whom the tax is collected, so that the former bears the burden indirectly.

The shiftability of a tax depends upon whether it affects the supply, and hence the price, of an economic good. Specific taxes on commodities in the hands of primary producers or dealers can usually be shifted to subsequent purchasers. To take the cigarette tax again as an example, suppose this amounts to five cents per package. If the cigarette industry was in a condition of approximate equilibrium before the imposition of the tax, the marginal costs of producing must have been equal to the marginal receipts of the manufacturers. This is in accordance with the principles set forth in the modern theory of prices. The new tax will increase the costs of manufacturing cigarettes by five cents per package. This will raise marginal costs above the marginal receipts (for the demand schedule will not be changed), thereby reducing profits. Some producers, who were just able to make both ends meet before, may now be forced to give up the business of making cigarettes entirely; others will merely reduce their outputs until marginal costs again equal marginal receipts. In either case, the production of cigarettes will be curtailed, and this will force up their price. In the end, therefore, cigarette buyers will reimburse the manufacturers for the tax, at least in part. Its burden will have been shifted to them to some extent.

There are many kinds of taxes to which a similar analysis will apply. All excise taxes, such as those on alcoholic liquors, tobacco, and playing cards, wartime luxury taxes, as well as import duties and special or general sales taxes, will fall in this category. Taxes on commodities in the hands of consumers, however, (such as automobile license fees) cannot be shifted because there is no subsequent purchaser to whom the tax might be passed.

In most cases a tax is shifted forward to consumers, as in the above examples, but there may be an occasional situation in which it may be shifted backward to suppliers of raw material. For example, a decline in the production of cigarettes might depress the price of leaf tobacco temporarily. But in the long run, the price could not remain below the cost of producing this commodity. Therefore, the tobacco growers might have to bear some of

the incidence of the tax in the short run, but not permanently. Sometimes a tax might be shifted back to a factor of production. It is conceivable that social security taxes, by making labor more expensive, might cause employers to substitute labor-saving machinery or other processes which would reduce the demand for labor, and this reduction of demand could depress wages. Here labor, rather than consumers, bears some of the incidence of the tax. There has been much controversy over the incidence of social security taxes.

If a tax does not affect the supply of a commodity, it cannot be shifted, but must be borne once and for all by the person on whom it is first imposed. Taxes on net incomes are of this sort. Poll taxes, taxes on excess profits, on personal incomes, on inheritance, and on the rent of land all fall in this category. Consider an excess profits tax as an illustration. Excess profits are pure profits over and above interest on invested capital, wages of management, and ordinary compensation for risk bearing. They are, therefore, a surplus over the costs of production, and if the government takes part or even all of them, there will still be enough left to provide the necessary inducement to business enterprisers. If producers attempted to pass the tax on to consumers in higher prices, the existence of the surplus profits would attract new producers into the industry; production would be thereby increased and prices would fall again. So, in the long run, the price cannot be raised, and therefore the tax cannot be shifted to buyers. Even a monopoly could not shift a tax on excess profits if we can assume that it already had its prices at the point of maximum profits before the tax was imposed; because, if it is to have the maximum possible profit *after* the tax is paid, it must have its total profits *before* taxes at the highest possible figure; therefore, it would not help it any to force the price higher in an effort to recoup its tax payments.

Suppose, however, that a tax were levied not only on excess profits, but on all profits, and that it was heavy enough to reduce the earnings of business generally below what is necessary to induce people to invest their money and undertake the risks of enterprise. This would discourage business activity and depress the whole economy. The people would bear the incidence in generally lowered standards of living or, perhaps, the burden would fall most heavily on workers who would become unemployed. There are some observers who believe that various business taxes in recent years have actually been so burdensome as to have this effect, and that the generally low level of economic activity between the two world wars is to be attributed partly to this cause. Be that as it may, the illustration suffices to make clear the basic principle that the shiftability of the tax depends upon its effects on production.

What has been said about taxes on profits in the last two paragraphs applies to taxes on corporate incomes also. Taxes on personal incomes are a little different. These are in most cases nonshiftable because they are not

levied on producers as such, but on consumers. Since the consumer stands at the end of a chain of business transactions, there is no one a stage beyond him to whom he can pass the tax; he must, therefore, bear the burden himself. However, if income taxes are levied at progressive rates and are so high in the upper brackets that taxpayers feel it is not worthwhile to exert themselves to acquire incomes above a certain figure, there might result some slackening of productive effort on the part of the very rich, so that the taxes would be felt by the social group at large in a somewhat lower real income.

Similar considerations apply to inheritance taxes. They must be paid out of the estate against which they are levied and cannot be shifted to anyone, but it is conceivable that they might be made so heavy as to deter the accumulation of savings, in which case they might restrict investment and so depress the economy.

Taxes on Land and Real Estate. Tax Capitalization.—The case of land taxes is always puzzling to students. The general rule here is that a uniform tax of so much per acre on land can be shifted, but a tax on the income (rent) from land, or on its capital value, cannot.

Let us take first the case of a specific tax of, say, five dollars per acre, levied on all land, regardless of its quality. There is always some marginal, or no-rent land, which just barely repays the wages and interest of the labor and equipment employed upon it; it yields no rent to its owner The five dollar tax on this land would reduce the yield below the cost of employing labor and equipment upon it, therefore the land would be abandoned. Production of the produce grown upon the land would be correspondingly reduced, and the price of these products would rise. In this way a part, at least, of the tax would be shifted to consumers.

A tax on the income from land (exclusive of the income from improvements) is, however, nonshiftable. Such a tax could be passed on to purchasers of produce grown on the land only if it somehow caused the supply of land (and hence of its products) to be reduced. But this is impossible, because land is not produced by man and it does not ordinarily wear out Land fertility can be destroyed by very bad farming, but there is no reason to suppose that farming would be any worse because of the tax; hence such destruction would not be increased It follows that the quantity of land will be just as great after the tax as it was before. The owners would not withhold any of the land from use, for they would have to pay the tax on it just the same. It would, therefore, be better to make the land yield what it could so that the tax would not be a dead loss Even if the tax took all of the rent, it would still pay to cultivate the land because, so long as the yield suffices to cover the normal returns for the labor and equipment employed, its use would still be worthwhile. The conclusion is unescapable that the supply of land in use would not be lessened Indeed, if the tax were substantial, it is probable that the supply would be increased, for much land that

is now held idle would be put into use in order to make it pay the tax. From all this it follows that the tax could not be shifted; the landowners would have to bear it.

At this point the student is likely to ask, could not the owners of rented land pass the tax on to their tenants by demanding a higher rent? The answer is no, because the demand for land, like that for other things, is somewhat elastic. This means that if rents were raised, the effective demand for land would be smaller, so that some land would be forced into idleness. Owners of the idle land would reduce rents again in order to obtain a sufficient yield from it to pay the tax. Not until rents had fallen to their former figure would all the land be re-employed. So, the supplies of land being fixed and the schedule of demand for it remaining unchanged, the rents cannot rise and the tax cannot be shifted to tenants.

Neither can a landowner shift the tax by selling his land to a purchaser, for the latter will deduct the capitalized amount of the tax from the purchase price. Suppose a piece of land yields a net income (rent) of $1000 per year, prior to the imposition of a tax. If the rate of interest is assumed to be 5 per cent, the land will be worth about $20,000, because the income it yields would be the same as that derived from $20,000 invested at that rate of interest. Now suppose a tax of $100 a year is placed on land of this kind. This will reduce the net yield from the land to $900 a year; therefore, the capital value would now be only $18,000. A purchaser would be foolish to pay more than this amount, because he has the option of other forms of investment not subject to the land tax. So the value of the land drops by $2,000, which is the amount of the tax capitalized at 5 per cent. If the owner wishes to sell, he must absorb this loss of $2,000, and the purchaser, although it is he who makes the annual payment of $100 tax to the government, has shifted the burden of that payment to the original owner. In effect, the land has been purchased free of the tax burden.

The program of Single Tax, which was described in Chapter XXIII, is based partly on the above reasoning. The program would tax the rent of land at 100 per cent, thus appropriating to public purposes all the rent now received by landowners. It is argued correctly that such a tax would not burden industry because it could not be shifted to either labor or investors.

Taxes on improved real estate must be distinguished from taxes on land alone. In this case, there are really two things being taxed—the land itself, and the buildings or other improvements erected upon it. The improvements will wear out in time, and they can be maintained or replaced only by new production. It will not pay to replace them unless their prospective yield promises a reasonable return on the cost of their construction. If an annual tax is placed on them, it will reduce the yield by a corresponding

amount, so that the return will not suffice to induce new investment. The supply of improvements will then be reduced until the price of the products derived from them rises sufficiently to yield a satisfactory return. If the improvements are very durable, this process may take a long time. Meanwhile, the owner may have to bear the burden of the tax for a considerable period. In the long run, however, as the supplies of improvements shrink, and the yield consequently rises, the tax will be gradually shifted to consumers. The part of the tax which falls upon the land, however, cannot be shifted, for the reasons set forth above.

Taxes on intangible property, such as stocks, bonds, and mortgages, are similar in their effects to taxes on real-estate improvements. For instance, if a new tax is levied on securities, holders of securities already in existence will have to bear it. If the securities are subsequently sold, the purchasers will deduct the capitalized amount of the tax from their value, and purchase them "tax free," as in the case of land. On the other hand, corporations seeking to sell new stocks or bonds to investors after the levy has come into effect, will have to raise their promised dividends or interest by the amount of the annual tax in order to make the net yield to investors (after payment of the tax) as high as it was before, because the volume of savings offered for investment will drop if the net yield is reduced, and this shortage of supply will force the price of investible funds upward So, in the long run, the tax will be paid by the borrowing corporations

Demand and Supply Factors in Tax Shifting.—It has been explained that taxes on commodities tend to be shifted to consumers because they reduce the supply, and so raise the prices, of the goods taxed. The amount of the price increase, and the exact distribution of the tax burden, will depend upon the characteristics of demand and supply in each particular case. For example, if the demand is inelastic, a slight reduction of supply may increase the price considerably, but if the demand is somewhat elastic, the price will rise by only a moderate amount. On the side of supply, there are three factors that bear upon the problem. The first is the degree of competition or monopoly prevailing in the industry concerned; the second has to do with the shape of the cost schedules; and the third is concerned with the durability of the capital employed in the affected industry Where capital lasts forever, as in the case of land, the tax cannot be shifted. Where its durability gradually wears out, the process of readjustment may take a long time, so that the producers will have to bear the incidence of the tax temporarily, although it will eventually be shifted to consumers. Where the capital wears out quickly, this adjustment will be more rapid, so that consumers will feel the burden quickly.

It is possible to show, by demand and supply curves of the conventional type, the precise effects to be expected from specific commodity taxes in various types of cases. It can be shown that in some cases the price will rise by

more than the amount of the tax, in some of the cases by less than that amount However, little is to be gained by going into these details here The important thing for our purpose is to recognize that some kinds of taxes are shiftable while others are not In the actual formulation of a tax program it is important to keep this in mind, so that the burden can be made to fall where it should.

A Good Tax System.—When the expenditures made by governments were very small, the tax burden was so slight that its nice adjustment among the citizens was relatively unimportant With the increase in the scope of government activities, and the rapid increase in expenditures, this problem has become serious The greater the portion of the national income that accrues to the government, the more important it is that the revenue be justly collected The complexity of the problem of determining the incidence of a tax should warn us against hasty, ill considered tax legislation The safest policy would be to base the tax structure as far as possible on direct taxes, the incidence of which can be fairly accurately determined, avoiding indirect taxes, the incidence of which is extremely doubtful In this way, the maximum degree of control over distribution of the tax burden can be achieved A good tax system, then, is one that (1) distributes the incidence with maximum justice, in accordance with the principle of ability to pay, and (2) adheres closely to the principles of efficiency in tax administration No single tax can accomplish these ends. The student should keep these general principles in mind as he surveys the tax system of the United States in the next chapter.

Summary

Public finance deals with the raising and spending of funds by a government in its varied activities Its scope is increasing as the functions of government expand Some authorities now advocate that governmental taxing, borrowing, and spending be used to control the level of activity in the economy at large, and to maintain full employment. There is much controversy over this issue Public expenditures have increased greatly in the last few decades, partly because of war and its aftermath, and partly because of new functions assumed by governments These expenditures influence prices, the direction of production, the distribution of income, and other aspects of the economy Efficiency in the fiscal administration of the government requires the adoption of a budget system in which the needs for revenue and the sources from which it is to be obtained are carefully set forth in advance There is a budget bureau in the federal government charged with this function, but final authority in revenue matters rests with Congress

Governments derive revenues from taxes, fees, licenses, and public

enterprises A good tax is one that is socially expedient, efficient in its administration, and just in the distribution of its burden. Administratively, a tax should be certain as to time and manner of payment; it should be collected in a convenient manner; and the expense of collection should not be excessive. There are three theories of justice in taxation. The benefit theory would tax each citizen according to the amount of benefit he receives from the state; this is impossible to calculate in most cases, hence the principle is best restricted to small fees and special assessments The equal sacrifice theory would levy taxes so as to equalize the sacrifice imposed on each person, but it is impossible to measure the sacrifice. The most widely approved theory is that each person should be taxed according to his ability to pay A proportional tax takes the same proportion of income or wealth from each taxpayer In a progressive tax the rate or percentage increases with the income or wealth of the taxpayer A regressive tax takes a larger percentage of income from the poor than from the rich. Progressive taxes best conform to the ability-to-pay principle.

The incidence of some taxes can be shifted from the taxpayer to purchasers of his products A direct tax is one that cannot be shifted; an indirect tax is shiftable A tax is shiftable if it causes a reduction in the supply of a good and a rise in the price of that good Specific taxes on commodities in the hands of producers (excise taxes) can be shifted; taxes on net incomes (e g poll, excess profits, personal income, and inheritance taxes) cannot be shifted Taxes on land rents cannot be shifted to tenants because the supply of land is not reduced by the tax, and, therefore, the rent obtainable cannot rise Neither can such taxes be shifted to subsequent purchasers, because the latter will deduct the capitalized value of the tax from the purchase price That part of real estate taxes which is placed on improvements will be borne temporarily by the owners, but will be shifted to users or purchasers in the long run, that part which falls on the land cannot be shifted at all Taxes on securities already in existence must be borne by the owners, but in the case of securities issued subsequently, it will be borne by the issuers thereof The precise effect of a tax on the price of the commodity affected depends on the elasticity of the demand and the conditions of supply in each case A good tax system will rely chiefly on direct taxes whose incidence can be known, and it will conform to the principles of ability to pay and of efficiency in tax administration.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

This chapter and the two that follow owe much to the excellent text of Harold M Groves, *Financing the Government* (1945) Other very useful treatments of the general field of public finance are Alfred G Buehler, *Public Finance* (1940), Maynes S Howard, *Principles of Public Finance* (1940), Hartley L Lutz, *Public Finance* (1936) For penetrating theoretical analysis, three somewhat older vol

umes are still well worth careful study: Hugh Dalton, *Principles of Public Finance* (1923); Carl C. Plehn, *Introduction to Public Finance* (1926); A. C. Pigou, *A Study in Public Finance* (1929).

The standard work, on which all study of incidence and shifting of taxes seems to be built, is Edwin R. A. Seligman's *The Shifting and Incidence of Taxation* (1909). A stimulating recent work is Otto von Mering's *Shifting and Incidence of Taxation* (1942). An interesting and thought-provoking attempt to modernize incidence and shifting theory is to be found in Chapter III of Albert Meyers' *Modern Economic Problems* (1939). Developments in the field of public finance are taking place so rapidly that one must constantly consult current periodicals for specialized studies.

CHAPTER XXV

The Revenue System of the United States

A. The Structure of the Federal, State, and Local Revenue Systems

Politics and Economics in Taxation.[1]—Political considerations cannot be disentangled from economic issues in a study of taxation because the passing of tax laws is a political process. A federal tax bill originates in the Ways and Means Committee of the House of Representatives. Public hearings are held, at which recommendations of the United States Treasury are presented as a basis for discussion. Subsequently, every shade of public opinion is presented, by such organizations as the United States Chamber of Commerce, the Consumers' Union, the American Legion, labor unions, farmers' organizations, and individual citizens. The President of the United States may send special messages concerning the proposed taxes to the committee. After the hearings are completed, a bill is brought before the House, where it is further debated, and perhaps amended, before passage. It then goes to the Senate, where it is referred to another committee, and a second public hearing is held. Since the bill passed by the Senate will usually differ from that passed by the House, differences must be compromised by a joint conference committee of the two branches of the legislature. Then the conference report must be accepted by both houses before the measure finally becomes a law. The procedure in state legislatures and city councils is similar.

In this process it is hard to get the legislators to give adequate consideration to the general welfare because each one is elected by a local constituency which expects him to represent its particular interests, rather than those of the community as a whole. So, a senator, although he may favor a general sales tax, may object to a tax on soft drinks because there is considerable production of such beverages in his state. A senator strongly opposed to sales taxes may, nevertheless, bitterly protest attempts to repeal the tax on margarine, lest the dairy industry of his state suffer from the competition of that substitute for butter. Congressmen from Michigan usually oppose a motor-vehicle use tax because their state is the primary

[1] This paragraph is based largely upon the excellent paper of Professor Mabel Newcomer, "Congressional Tax Policies in 1943," published in *The American Economic Review*, December, 1944.

producer of automobiles. A Kentucky senator objects to liquor taxes, and a Virginia senator opposes increases in the tax burden on cigarettes. So, the congressman is almost forced to subordinate economic principles to the special interests of his constituents. In his despair, he looks for revenue where the political opposition is least. An old tax, to which the public has become accustomed, is preferred to a more equitable new tax that redistributes existing tax burdens. A hidden tax gets better support than a tax which has a direct impact. Tax laws become complicated, and all suggestions for simplification and reform must contend with powerful pressure to maintain the *status quo*. This mingling of economic and political factors, which is clearly evident whenever specific taxes are under consideration, must be accepted by the student of applied economics. Recognition of the necessity for compromise may advance the cause of equity more rapidly than a stubborn insistence on theoretical perfection.

Sources of Tax Revenue.—The relative importance of the major sources of tax revenues can be observed in the table on the next page. The year 1941 was selected for this purpose because it was the last normal year prior to the emergency financing of the Second World War.

Federal sources of tax revenue are limited by the Constitution of the United States, which provides that all direct taxes levied by the federal government must be apportioned among the various states in accordance with their respective populations, and that duties, imposts, and excises must be uniform throughout the United States. Direct taxes, as explained in the last chapter, are those whose burden is borne by the person on whom they are levied. Indirect taxes are those which are not borne ultimately by the person on whom they are levied, but are shifted to other persons. In practice this distinction becomes very vague, but since the words direct and indirect are used in the Constitution, the terms continue to have an important influence on the structure of our tax system. The restriction imposed on the use of direct taxes had the result that, prior to 1913, the federal government secured practically all its revenue from indirect taxation—primarily excise and customs duties. In 1913 the Sixteenth Amendment to the Constitution was ratified. This amendment provided that, "Congress shall have power to lay and collect taxes on incomes, from whatever sources derived, without apportionment among the several states, and without regard to any census enumeration." The way was thereby cleared for the direct taxation of incomes, and this form of taxation rapidly developed into the most important single source of revenue in the federal tax system. In 1941 over 44 per cent of federal tax revenues were derived from personal and corporate income taxes. Excises, consisting primarily of alcoholic beverage, tobacco, and motor fuel taxes, accounted for about 30 per cent of total federal revenue. The decline in the yield of customs duties to 5 per cent of the total shows the sharp shift in the structure of the federal

Relative Importance of Major Sources of Tax Revenues 1941 [2]

Type of Tax	Per cent of All Tax Revenues	Per cent of All Federal Tax Revenues	Per cent of All State Tax Revenues	Per cent of All Local and Territorial Tax Revenues
Individual Income	9.7%	18.1%	5.2%	.13%
Corporate Income	13.2	26.3	4.2	.21
Inheritance, Estate, and Gift	3.1	5.2	2.7	.03
Property	26.4	—	5.6	89.72
Customs Duties	2.4	5.0	—	.25
General Sales	3.7	—	12.6	1.42
Alcoholic Beverages	6.0	10.3	4.8	.16
Tobacco	4.7	8.9	2.4	.08
Motor Vehicle Fuel	8.3	6.4	20.3	.22
Miscellaneous Excises	2.4	4.2	.4	1.33
Payroll	11.2	12.7	20.0	.16
Specific Businesses	5.3	2.5	11.5	4.20
All Other Taxes	3.5	.4	10.3	2.07
	99.9%	100.0%	100.0%	99.98%

tax system. Payroll and estate taxes account for most of the remaining federal income.

The states have derived most of their revenues in the past from the taxation of property, and the property tax still retains the dominant position in a number of states, but the proportion of total revenue received from this source has been declining rapidly with the introduction of new forms of taxation. In 1941, the motor fuel tax held first place in state tax systems, accounting for over 20 per cent of total state revenues. Payroll taxes to finance growing social security programs accounted for about 20 per cent of total revenues. Sales taxes, specific business taxes, and income taxes all appear to be increasing. As a group they yield over 33 per cent

[2] Table developed from *The World's Biggest Business 1914-1944*, National Industrial Conference Board (1944), Table 9, page 16, nontax revenues and transfers from other government levels excluded.

of total revenues. The remaining state revenues come from a wide variety of miscellaneous sources, of which taxes on property, alcoholic beverages, inheritance, and tobacco are the most important

Local government units still rely heavily upon the general property tax, obtaining about 90 per cent of their total tax revenues from that single source Business, excise, and sales taxes account for most of the remaining revenue, although there is a tendency towards the use of the income tax by cities as a way out of pressing financial difficulties

Multiple Taxation and Conflicts in Jurisdiction.—The upward trend in federal, state, and local public expenditures has placed a severe strain upon the entire tax system of the United States The resulting search for additional revenue has induced each level of government to invade new taxable areas, and the outcome has been multiple taxation and serious conflicts in jurisdiction.

Multiple taxation of a single tax base has become commonplace. The federal government, relying upon the income tax as its major revenue producer, finds states and even cities invading this field A citizen may be faced with the obligation of filing three separate income tax returns. Taxes on tobacco, alcoholic beverages, and motor fuels are levied by the federal government, state governments, and a growing number of municipalities. Death taxes (i e, taxes on inherited wealth or on decedents' estates) are assessed at both the federal and the state levels. Property is taxed at the state and local levels.

This complex pattern of multiple taxation has brought with it many collateral problems of conflicting jurisdiction among the several taxing authorities. This has been so especially among the states. The problem is well illustrated by death taxes. A citizen may have his legal residence in state A, hold title to property in state B, and own stocks and bonds of corporations located in state C. Which state, or states, should have the legal right to levy a tax when the property is transferred at death? This confusion has been partly clarified by Supreme Court decisions ruling that the decedent's real property can be taxed only in the state where it is located at the time of death, while intangible property (such as stocks and bonds) can be taxed only by the state in which the decedent's domicile was located. State and city income taxes involve similar confusion. A citizen may live in state A, earn his salary in state B, and receive interest and rents from property located in state C. All three states can (and often do) claim the right to tax the same income. This conflict in jurisdiction has not as yet been resolved. A logical solution would appear to be either to tax the total income of the taxpayer in the state in which he resides, or to restrict the tax to income originating within the taxing state, regardless of the recipient's residence.

A man who lives in one state may own a piece of real estate located in

another. If he lived in the same state as his property, it would be taxed only once, but in his case it is likely to be taxed by both the states concerned, thus doubling his burden. Similarly, the property of a corporation is likely to be taxed once in the state where it is located, and then its stock- and bondholders may be taxed in the states where they live. These duplications would not necessarily lead to injustice if the rates were determined with reasonable attention to the total burden resting on the taxpayers. However, with different jurisdictions competing for revenue, it is not likely that taxes will be framed and administered with tolerance and wisdom in this respect. Therefore, the results of conflicting jurisdictions are, on the whole, unfortunate. The formulation of a solution for this problem would carry us beyond the field of tax economics into that of practical administration, involving us in the political aspects of public finance. We cannot go into this in detail. It is enough here to say that there is a strong need for (1) separate, clearly differentiated sources of revenue, and (2) clarification of jurisdictional issues. Attention to these problems would make a real contribution to a better functioning economic system.

Tax Sharing.—One answer to the problem of multiple taxation is the principle of tax sharing. Let one jurisdiction (the federal or state governments, for instance) levy a tax and then return to the lower political subdivisions an agreed proportion of the revenue collected within each individual jurisdiction. Thus a state might levy an income or sales tax and then return to its cities or counties an agreed percentage of the revenue collected in each. Carried to the extreme point, the federal government might have the sole right to levy income taxes, and then it could return a share to the state and local governments. The advantages are clear. The taxpayer would have to face only one levy (and a single report in such cases as the income tax), the cost of administration would be reduced by elimination of duplicate sets of officials, and the enforcement of the tax could be organized more effectively. A simplified and well integrated over-all tax system would reduce or remove competition between tax jurisdictions, and it would meet the financial needs of state and local governments.

The device of tax sharing encounters strenuous opposition from officials fighting to prevent the loss of their prerogatives, to say nothing of their jobs. The battle cry is for more home rule and less centralization of government powers. A more justifiable objection is the doubt that any scheme could be formulated that could by general rules meet the divergent needs of each "sharer." For example, a ten per cent turnback to cities and counties might give rich cities so much revenue that municipal extravagance would be encouraged, while a poor community would be unable to

pay for the schools, roads, and other public services urgently needed. Revenue would not be adjusted to needs.

Grants-in-aid.—When tax sharing is adjusted to needs rather than to the revenue collected in a given area, the system is known as one of grants-in-aid. There is wide variation between the wealth and income of different states and between different localities within a single state. This makes it difficult to attain the desirable goals of uniform standards and reasonably equitable treatment unless there is an over-all plan of collecting and distributing tax revenues. While the principle is as old as the public land grants of the early 1800's, it was not until the great depression of the 1930's that this method of distributing public revenues reached significant proportions in our fiscal policy. Highways, public buildings, education, and a wide variety of welfare activities depend on federal and state grants-in-aid. The system is usually defended as necessary to promote and stimulate interest in the subsidized objectives. The unequal distribution of both economic power and public enlightment on such public activities as unemployment, old age insurance, and better schools, results in serious diversity of treatment. By establishing minimum standards under which aid will be granted, central governmental bodies can obtain considerable control over expenditures at lower government levels. In Chapter XI the use of this device of control was explained as part of the mechanism of the federal Social Security Act. State grants to localities for public education also have been effective in raising standards by such requirements as minimum salaries to be paid to teachers and the consolidation of small inefficient rural schools

Opposition to grants-in-aid has been very vocal. It is charged that federal grants-in-aid constitute unconstitutional interference with the rights of the states. Since protection of health, morals, and the general welfare (the police power of government) fall primarily within state jurisdiction, the establishment of tying in conditions as a price for the receipt of federal aid is, in practice, a coercive force extending the powers of the federal government along lines otherwise closed to federal intervention. This same charge has been made by cities, counties, and school districts against state authorities. The perplexing problem of selecting a proper basis for apportioning shared revenues receives equally sharp criticism Some grants are conditional upon the local authority matching, dollar for dollar, the amount of the grant-in-aid from above. This method clearly works against the financially weak subdivisions. Then there is the difficulty of defining "needs." And finally, there is some justice in the charge that any form of grant-in-aid encourages inefficiency and extravagance in the expenditure of public funds, because the restraining thought, that increased local expenditures will result in increased local taxes, is absent when local revenues

are derived from grants of a higher governmental body whose revenues are collected over a wider area.

The use of grants-in-aid is not just a means of reducing the evils of multiple taxation and conflicting tax jurisdiction. As indicated above, the major purpose is to supply a coercive force for the raising of standards and the establishment of equality in treatment on a national or state-wide scale. But the possibilities of applying tax sharing and grants-in-aid to the problems of multiple taxation and the competitive struggle for new sources of revenue are worthy of very serious consideration. Additional revenue can be obtained without increasing the now chaotic and overlapping tax pattern. The taxpayer and the tax administrator can be relieved of an unnecessarily complex tax system.

B. The Taxation of Income and Profits

Income as a Source of Tax Revenue.—Contrary to popular ideas, practically all taxes are paid out of income; for, since taxes are generally paid in money, they must come from the circuit flow of money income, which means that they must come out of someone's money receipts.[3] This is true even if the tax is levied on a capital good, such as a factory. The taxpayer cannot detach a part of his factory and give it to the government; the actual payment must be paid out of the income derived from the factory, or out of some other income source. If, in an extreme case, the owner must sell the factory (or some other capital asset) to meet his taxes, the payment will not come out of *his* income, but it will come from that of the purchaser. The only significant exception to this basic principle would be a case where taxes are to be paid in property—a case that might well arise if a transition to a socialistic economy were to be effected by means of a capital levy.

The fact that all tax payments are made out of income, combined with the widespread acceptance of the ability-to pay principle, has resulted in a rapid growth of income taxation. Proponents of this principle argue that the income received by a citizen during a given tax period is the most accurate index of his ability to pay. Some writers have gone so far as to suggest that all other forms of taxation should be eliminated, thus carrying the ability-to-pay principle to the limit. In practice, however, the difficulties encountered in measuring income and collecting income taxes are so serious as to make its exclusive use inadvisable.

Types of Income Taxation.—Income tax laws differ widely in type; many alternative taxing methods are open. The tax may be levied on the

[3] A tax may sometimes be paid out of a hoard of cash or out of idle bank balances, in which case the funds may have been accumulated in an earlier income period, but this is exceptional.

total income of the *taxpayer* (individual or corporate) after he receives it; or it may be levied on the *source of income* (wages, interest, dividends, etc.) before he gets it. In the latter case it is often called a "stoppage at the source" income tax. The chief disadvantage in the use of the stoppage at the source method is that it reduces the possibility of progressive taxation. To apply the progressive principle fully, we must know the taxpayer's income as a whole. However, the method has the very real advantage of reducing the opportunities for evasion and permitting different rates to be levied against different kinds of income. A tax on the taxpayer's income as a whole requires him to declare his total income receipts, and this puts him under a great temptation to evade part of the burden by false reporting. The type of income tax where the taxpayer must make a declaration has been generally used in the United States, although the current federal law provides for withholding a part of the tax at the source, as a compromise between the two methods. England has relied heavily upon the stoppage at the source technique.

Income taxes may also be distinguished as to whether they are levied on use value or on realized value. For example, if use value is accepted, the owner of a dwelling house occupying the property himself would be compelled to estimate the rental value of the property and add that sum to his taxable income; while a tax on the realized value basis would include only receipts of money rents. The use-value principle has been employed to some extent in England, but not in the United States.[4]

In selecting the tax base, a choice must be made between net income or gross income. The usual practice is to accept net income as the tax base. It is this aspect of the law that causes many of the complexities of reporting, so harassing to the citizen. To arrive at net income, exemptions and deductions from gross income must be permitted. The principle of gross income taxation has gained many supporters, who believe it has advantages over a sales tax, to which it is closely related.

Finally, income taxes can be levied on real persons, on corporations, or on both On this issue the debate has been extremely active. It will be discussed below.

Problems of Income Taxation.—As students of economics, we are not directly interested in the multitude of administrative and jurisdictional problems that confront the legislator when formulating new income tax legislation. However, many of the most important issues demanding solution offer beautiful examples of the application of economic principles. We shall examine five areas of controversy: (1) the definition of income,

[4] The Wisconsin state income tax did require the reporting of rental value of homes occupied by the owner for a short period of years, but difficulties of administration forced the repeal of the rule

(2) taxation of capital gains and losses, (3) irregular incomes, (4) taxation of corporate income, and (5) the net tax base.

The Definition of Income.—The use of the income concept as a device for measuring one's ability to pay taxes implies some definition of income. Unfortunately, there exist wide differences of opinion among economists as to how income should be defined, and tax authorities have found the problem of defining it most perplexing. Is income the money one acquires within a period of time; is it the goods one receives or buys with the money; or is it the psychic satisfactions one derives from the consumption of those goods? If the tax is based on money acquired, then it would exempt all receipts in kind, such as food produced and consumed by a farmer and his family, the use of a dwelling occupied by its owner, wages received in the form of a crop share by a farm worker, and living quarters supplied to a minister by his parish. If it is based on satisfactions derived from consumption, then it would exempt any money saved by taxpayers out of their current receipts, because these savings involve the postponement of satisfactions until sometime in the future. If it is based on goods received or bought, then both savings and receipts in kind would be taxed. So, the nature of the tax depends on the definition adopted, and there are other tax problems that depend on the matter of definition. For instance, does a corporation have an income independent of the income of its shareholders? Again, does a rise in the market value of a share of stock constitute income to the shareholder, or must the tax collector await the day of sale and calculate "income" as the difference between the purchase and sale price of the security? The answer to such questions hinges upon the concept of income that underlies the tax.

The income tax amendment to our federal Constitution uses the word income without defining its content. Consequently the burden of defining the term, for federal tax purposes, has fallen largely on the Supreme Court of the United States. Congress can tax as income only what the Supreme Court recognizes as such. For example, the Supreme Court has declared that the taxpayer is no richer or poorer after he receives a stock dividend, he merely has different securities for an unchanged equity in the corporation.[5] In the eyes of the Court, a tax on stock dividends would be a tax on capital.

American income tax experience has cut the Gordian knot of definition by considering as income for tax purposes, *the receipt by taxpayers of money or money's worth, growing out of the process of production and actually realized, after deducting all necessary cost of acquisition.* The phrase "growing out of the process of production" means that the tax is applied only to incomes received directly from the proceeds of industry, such as wages, interest, rents, or profits, incomes subsequently transferred

[5] *Eisner v. Macomber*, 252 U S 189 (1920)

from their original recipients to others, by gift or bequest, are not taxed. The phrase "and actually realized" means that income is not taxed unless and until it is received in the form of money.

This definition has the merit of being administratively practical, but it contains numerous elements of what might be called injustice. For example, a farmer secures much of his living in the form of food and shelter directly from his farm, but a bank clerk must purchase food and shelter out of his salary. Thus the bank clerk is allowed no deduction for living expenditures, while the farmer has the advantage of omitting that part of his real income from the computation of his taxable income. The same difficulty is illustrated by the ownership of property. The individual who owns his own dwelling house is in the enviable position of excluding rent payment from his taxable income, yet the rental value of his house is real income just as truly as though he paid for it. A tenant, on the other hand, pays for his rent out of his money income, without a tax deduction. His income is less than that of the other by the amount of this rent, but his tax is not reduced on that account. Sufficient has been said to demonstrate that, in spite of care in formulating an income tax law, the result must be far from a perfect measurement of ability to pay. While the income tax may serve as the core of a tax system, the gaps must be filled in by other taxes.

Capital Gains and Losses.—The purchase and sale of capital assets (e.g. stocks, bonds, real estate) results in money gain or loss. Should such changes in capital value be included in the calculation of taxable income? Strict application of the ability-to-pay theory certainly gives an affirmative answer to this question. The taxpayer becomes richer by the sale of a share of stock at a profit, and poorer by a sale at a loss. The catch in this apparently simple solution is that the appreciation or depreciation may be spread over a *number of years*, but the total amount of value change must be applied to the taxable income of *one year*—the year in which the realization takes place through sale. Thus a taxpayer may buy a block of securities at $10,000 and, after these securities gain in market value at the rate of $1,000 a year, sell ten years later for $20,000. He would then find the accumulations of ten years ($10,000) added to his taxable income in one year and subject to progressive rates. If the law had provided that the accumulated value of each year ($1,000) should be included in the taxable income of that year, the total gain would be taxed at lower rates, much to the taxpayer's advantage. However, if the law provided that all capital gains should be included in the tax base each year regardless of the sale or nonsale of the asset, the complications added to effective administration would be simply fantastic. Every asset held by the taxpayer would have to be revalued for tax purposes every year.

A secondary difficulty encountered in taxing capital gains and deduct-

ing losses is the effect upon income tax yields In a depression, a sharp drop in capital values could be offset against other income, so that a rich man might find his taxable income reduced to zero. Securities could be sold at a loss and then immediately repurchased at the same price, thus recording a taxable loss on the realized basis.

Since capital value changes alter the taxpayer's income and ability to pay taxes in just as real a manner as variations in his salary or dividends, sound policy demands their inclusion in the tax base To accomplish this end and at the same time avoid an unfair burden on the taxpayer presents a quite perplexing problem The federal income tax (as of 1946) deals with the problem by dividing capital gains into two classes, short term and long-term, which are treated differently Short-term gains and losses (defined as those where the assets have been held only six months or less) are treated the same as all other income. In the case of long term gains (where the assets have been held more than six months) the taxpayer is given his choice of two alternatives (1) He may elect to add half the gain to his other income, to be taxed at rates determined by the size of his income as a whole. Or (2) he may elect to pay a flat rate of twenty-five per cent on the entire capital gain If he takes the first option, half of the gain is exempt from tax, but the remainder is taxed progressively If he chooses the second option, the whole gain is taxed, but the rate is not progressive, which is a great advantage to taxpayers whose incomes are so large that they are subject to very high rates In the case of long-term losses the government is less generous. The taxpayer is allowed to deduct from his income in any one year capital losses only up to the amount of his capital gains in that year, plus $1,000 However, if his losses exceed his gains by more than the latter amount, he may spread the rest of the loss over the ensuing five year period, provided he does not violate the above rule for any one of those five years This policy with respect to capital gains and losses is a compromise, but it is only by compromises that a workable income tax can be developed[6]

Irregular Income.—The major difficulty in equitable taxation of capital gains arises from the irregularity of income from that source. The same difficulty arises in every case where the flow of income is irregular An author may spend ten years writing a book (such as *Gone With The Wind*), only to find his reward drastically cut by taxes because the bulk of the sales take place in a single year An inventor may work twenty years on an idea and sell it for a large sum, all of which is taxed at progressive rates in the year of the sale. A prize fighter may gradually work his way to the top, and then get his monetary reward as champion within a short period of only one or two years. A businessman, or a member

[6] For an excellent analysis of the difficulties in this problem see Chapter VIII of Harold Groves *Production Jobs and Taxes* (1944)

of one of the professions, may find that, while he averages $20,000 a year for a ten-year period, fifty per cent of the total income may have been earned in a fortunate two year period.

Economists interested in the theory of income have given considerable study to the theory of irregular gains Is regularity of receipts an essential attribute of the income concept? Professor Carl Plehn presented a very forceful defense of the view that it is, as early as 1924.[7] British income tax legislation recognizes regularity as a test of taxable income by excluding certain "casual profits" from the tax base. The inequity arising from this cause in the distribution of the tax burden is not great when the progressive rates are moderate, but when the rate of progression is steep the injustice become serious If the ability-to-pay principle is to be fairly applied, irregular receipts should be averaged over a period of years. The chief objection to averaging is tax liability in years of low income. Taxpayers find it onerous to pay large taxes in "lean" years to meet obligations resulting from an exceptionally good year in the past. To meet this situation, it has been suggested that the taxpayer be permitted to sum his taxes over a period of years, calculate what the tax bill would have been if the income received had been evenly distributed through the period, and then claim a refund (or tax credit) for the difference[8] It should be possible to formulate a reasonable compromise The principle is clear, and experimentation may develop an administratively feasible solution.

The Taxation of Corporate Income.—A corporation is not a real person, but an artificial being created by the state. Since it is merely an association of individuals, operating as a single unit, it cannot really be said to have an income independent and distinct from that of its stockholders, except when viewed superfically or as a legal entity. To tax the income of a corporation when earned, and then tax it again when it reaches the hands of the stockholders as dividends, is quite obviously double taxation In cases of holding companies, where the earnings of the operating company pass through a series of stockholders to the possessors of the uppermost layer of securities, double taxation expands into multiple taxation A corporation income tax also defies the principle of justice, that the burden of a tax should be distributed on the basis of the taxpayer's ability to pay This is because there is no necessary relation between the size of a corporation's income and the size of the incomes of the persons to whom its earnings are distributed. To illustrate, corporation A may have an annual net income of $1,000,000 which is distributed among only 200 persons, the stock being very closely held. Here the income per stockholder is $5,000 On the other hand, corporation B may

[7] Carl C Plehn "The Concept of Income as Recurrent, Consumable Receipts, in *The American Economic Review* March, 1924

[8] Groves *op cit* p 85

have an annual net income of $10,000,000, to be distributed among 10,000 stockholders Here, although the total income is greater, the income per stockholder is only $1,000. Quite clearly the ability of these stockholders to pay taxes is not properly indicated by the net earnings of the two corporations. It is unjust to tax the two companies on the basis of these earnings, and if the tax rates are progressive, the injustice is aggravated The case is very strong for the elimination of corporate income taxes and reliance upon improvements in the personal income tax to reach the earnings of such enterprises.

On the other hand, there is much to be said in defense of the opposing view. Corporations are given valuable special privileges not extended to individual enterprises or partnerships. Limited liability, and easy transferability of ownership by the sale of securities, give unique protection to the investor and aid materially in the competitive search for new capital Because of these special privileges, it is argued, the corporate stockholders may justly be made to pay special taxes. Against this argument it has been said that a privilege available to *anyone* who obeys the laws of incorporation cannot be said to be a very exclusive right If one insists on such an application of the benefit theory of taxation, an incorporation fee, or a license to do business, would be a preferable solution Much more serious is the charge that the elimination of corporate income taxes makes it possible for shareholders to evade the tax burden by reinvesting a company's earnings Since control of management by stockholders is very tenuous under modern conditions,[9] the temptation for management to expand the enterprise and at the same time reduce the burden of taxation on its wealthy backers, by reinvesting the earnings, is very strong indeed. Is it in the social interest that savings should be influenced by such motives?

The answer must be a compromise that avoids unnecessary double taxation, but at the same time reduces to a minimum tax evasion by reinvestment of corporate earnings Just how to accomplish these objectives is one of the most difficult problems encountered in the entire field of public finance. Not without misgivings, the present authors suggest (1) restriction of the regular corporate income tax to a flat rate on all earnings, irrespective of the proportion distributed as dividends; (2) legal recognition of the tax paid by the corporation as an advance payment for stockholders, with permission given the shareholder to credit this tax advance against his personal tax liability when dividends are received, or when he realizes capital gains by sale of the security; and (3) the re-enactment of a progressive tax on additions to corporate surplus (undivided profits) in excess of a reasonable exemption to permit a healthy growth of the taxed enterprise. These principles eliminate double taxation and reduce the injustice caused by the progressive taxation of corporations irrespective of the

[9] See the discussion of this point in Chapter IV

ability to pay of individual stockholders. The return to a tax on reinvested earnings offers real difficulties, but without some check on the evasion of taxes by reinvestment of corporate earnings, the objectives of progressive taxation of personal incomes become very difficult of realization. A more extended analysis of this problem is given below.

The Net Tax Base.—Justice appears to require that the recipients of large incomes pay heavy taxes while those who receive small incomes should be either exempt or subject to very low rates. This philosophy has been written into the income tax law by authorizing a system of exemptions, credits, and deductions before arriving at the net tax base to which the tax rates are applied. Exemptions include such items as the proceeds of insurance policies, interest on state and local government bonds, and the earnings of cooperative farm marketing or purchasing associations, when at least half their business is with members of the association. Credits include a personal exemption and exemptions for dependents Deductions include: business expenses; gifts made for charitable, educational, or literary purposes (if they do not exceed a certain percentage); all taxes paid other than income; death, gift, and excise taxes; and all interest paid on indebtedness.

All this differentiation in distributing the tax burden is designed to improve tax administration and to protect the general welfare. However, the effect is to reduce the amount of income in the net tax base and, consequently, to cut the revenue yield We have already noted the amazing growth of government expenditures that has resulted from the expansion of government functions. Experts believe the federal budget alone will exceed twenty-five billion dollars a year for many years to come. If the income tax is to be selected as the chief revenue producer, it is clear that a large tax base must exist, or the higher incomes will be completely taxed out of existence. The resulting battle of pressure groups is easily understandable. Groups receiving special privileges resist the removal thereof. The reduction of credits and deductions to reach lower incomes is politically a very unpopular move because the number of voters affected is necessarily very large. But the lower incomes must be brought into the tax base, or else the income tax must be reduced to a less important source of revenue. In the latter alternative, sales taxes, excise taxes, and the like become mandatory if the requisite flow of revenue is to be maintained.

The Federal Income Tax.—The federal income tax law as of 1946 will serve to illustrate the technique of income taxation. The basis of the personal, or individual, tax in that year was the net income of the taxpayer. As described above, net taxable income was computed by deducting from gross income various items classified as exemptions, deductions, and credits. For example, a bank clerk with a wife and three children, earning an income of $2,800, would pay no tax. He would be allowed a $1,000 credit

for himself and wife, $500 for each child, and up to 15 per cent of his total income for contributions, taxes and other legal deductions.

The rate of tax was a combination of what are called normal taxes and surtaxes. The normal tax was a flat rate of 3 per cent on the entire net taxable income. The surtax was an additional progressive tax, which started at 17 per cent on the first $2,000 of taxable income, and increased by gradual steps to a rate of 88 per cent on all income above $200,000 a year It will be noted that these surtax rates applied only within certain limits, or "brackets." Thus, a person with a net income of $300,000 did not pay 88 per cent of the whole amount, but only 88 per cent of $100,000, that is, the excess above $200,000. After the total tax was so computed, the law in 1946 allowed a final deduction of 5 per cent of that total. This peculiar provision was enacted at the close of the Second World War to satisfy popular demand for tax reduction, by a device that reached all income levels on a proportional, rather than progressive basis. The taxpayer owing $25 tax got a reduction of $1.25, while a taxpayer owing $100,000 got a reduction of $5,000.

Under the law as of 1946, corporate net incomes were taxed in a manner very similar to the technique used for personal income taxation The total burden was a combination of normal and surtax rates This combination amounted to a total tax of from 21 per cent on corporations with $5,000 of taxable income up to 38 per cent on corporations with taxable income over $50,000.

The Taxation of Profits.—The earnings of business can be taxed in two different ways: (1) as net income after deduction of allowable business expenses, or (2) as profits measured as a percentage of yield on the capital investment. The burden of the two types of earnings taxation can be quite different For example, assume that two corporations have an identical net income of $100,000, but corporation A has a capital investment of $1,000,000 while corporation B represents an investment of only $500,000. Corporation A is earning 10 per cent on its investment while corporation B is earning twice that rate, or 20 per cent. A net income tax would tax both corporations an equal amount, but a profits tax on excess earnings above 8 per cent would fall much more heavily on B than on A Some tax authorities, therefore, believe that the case for percentage profits taxation is much better than the case for net business income taxation A progressive tax on the yield per dollar invested seems to fit the test of ability to pay The usual form of a profits tax provides for an exemption of a stated minimum yield, and then applies the tax rate or rates to the excess profits above that minimum.

The exigencies of war finance forced the enactment of excess profits tax laws in both world wars Under the law of 1943, the amount of excess profits subject to tax could be calculated by either of two methods, at the

option of the taxpayer. The first method computed the excess of current profit over 95 per cent of the average profit received in the base period of 1936 to 1939. The second method permitted an exemption of 5 to 7 per cent (depending upon the amount of the capital investment) of current profits on invested capital. The residual excess profit, calculated by either method, was subject to a tax of 95 per cent. However, the law provided that the total burden of the normal tax, surtax, and excess profits tax must not exceed 80 per cent of the amount of income subject to surtax rates. A novel feature of the law was a postwar credit of 10 per cent, to be returned by the government to the business as a nest egg for industrial reconversion to peace at the close of the war.

The case for the taxation of excess profits as a measure of war finance is quite strong. Private enrichment as a consequence of a national calamity is obnoxious to most persons. Profits taxation reduces the danger of profiteering and aids in the control of inflation. The tax is extremely productive of revenue, and collection is not difficult while patriotism runs high. The chief objection is the tendency to encourage extravagance and unnecessary expenditures on the part of business enterprises at the expense of the government. For example, an elaborate advertising program, paid for with funds that would otherwise be subject to a 95 per cent tax, will actually cost an enterprise only 5 cents on the dollar.

With the return of peace, the merits of profits taxation become more dubious. A peacetime tax may recapture monopoly gains, but it will at the same time reach the gains of necessary risk-taking and exceptional managerial efficiency. There are better and more direct methods for making a frontal attack upon monopoly power.[10] Also, the tax discriminates against a corporation with an irregular income. Regularity of income becomes a decided advantage to an enterpriser. Finally, under conditions of normal operation, the administrative and enforcement difficulties of profits taxation multiply rapidly. Unless accounting methods and expenditures are rigidly supervised, evasion of the tax burden becomes general.

With all these factors considered, most tax economists oppose profits taxation in time of peace. Pressure against the levy became very vocal at the end of the Second World War, with the result that the excess profits tax was repealed, effective January 1, 1946.

The Taxation of Undistributed Corporate Earnings.—Our analysis of the general problem of income taxation showed that the reinvestment of corporate earnings is a simple device that offers an easy loophole for evasion of the personal income tax. Stockholders escape the tax to the extent that corporations permit their earnings to accumulate as additions to surplus, instead of paying them out as dividends. A number of such additions may be made in the course of a lifetime without payment of a tax thereon by

[10] See Chapter III for such a program.

a stockholder, and when he dies the gains are placed forever beyond the reach of the tax collector, except for the special tax on capital gains, which would still be collectable if the securities should later be sold at a profit.

To plug this loophole, Congress put into effect the Undistributed Profits Tax of 1936. In the Revenue Act of that year provision was made for two types of taxes on corporation incomes: a graduated normal tax on net income, and a graduated surtax on *undistributed* net income. The normal tax placed a levy on the net incomes of corporations, beginning at eight per cent on incomes not in excess of $2,000, and rising progressively to fifteen per cent on net incomes over $40,000 The undistributed profits tax was imposed annually on that part of the corporation's net income (after deducting the normal corporation tax payable) that was not paid out, in the year in which it was earned, in dividends which were immediately taxable in the hands of stockholders The rates were graduated from seven per cent, when the amount undistributed was not over ten per cent of the adjusted net income, to twenty-seven per cent on undistributed net incomes in excess of sixty per cent of the adjusted net income.

It has been said that "no tax measure in recent years has been more generally misunderstood, and few have stirred more widespread and heated discussion" that the undistributed profits tax.[11] The proponents of the tax had two particular objectives in mind (1) forcing wealthy stockholders to pay the surtaxes on income which they had hitherto been avoiding by allowing their earnings to remain in the corporation; (2) stimulating and, to a degree, regulating the economy. As to the first objective, it was generally agreed that the tax would be reasonably successful, but some authorities have suggested that other devices might be used to prevent tax evasion without the undesired economic effects of the undistributed profits tax The second objective proved more controversial Proponents of the tax believed that the taxation of undistributed earnings would stimulate dividend distributions, and thereby mitigate the dangers of overinvestment, additions to corporate surplus would be based on investment needs rather than on the desire to evade taxes. Critics retaliated, however, with the argument that, if corporations were not allowed to build up reserves in good times to be used in bad times, bankruptcies would be more widespread in depression and purchasing power would be maldistributed Furthermore, it was contended that, if young corporations were not allowed to "plow back" their earnings, their growth would be retarded Finally, opponents believed the tax especially burdensome to middle sized corporations that were too large to persuade their stockholders to reinvest dividends and too small to market new securities economically

There is much to be said on both sides of this controversy, but the essential point must not be obscured by adroit reasoning, that, unless

[11] Twentieth Century Fund, *Facing the Tax Problem* (1937), p 463

evasion of the personal income tax by reinvestment of corporate earnings is restricted, the philosophy and objectives of progressive taxation become extremely doubtful of realization in practice. A fundamental principle of personal income taxation is at stake This suggests that some taxation of undistributed profits is a needed supplement to personal income taxes.

C. Commodity, Property, Death, Social Security, and Business Taxes

Commodity Taxation.—The need for new sources of revenue to meet expanding government budgets has led to a search for taxes that would reach a larger tax base and thereby make possible a high yield from low tax rates Customs duties, excise taxes, and sales taxes all meet these requirements because they are levied against the primary stream of commodity production They are all excellent revenue producers, but they are regressive, and therefore they fail to conform to the principle of ability to pay. Their burden is distributed in proportion to the taxpayer's consumption rather than in proportion to his income, and this takes a larger share of a poor man's income than of that of a rich man, because the poor spend relatively more and save relatively less than the rich. The resort to commodity taxation, especially by state governments, has accelerated since 1930. By 1941, it had become the source of over forty per cent of total state revenues If state payroll taxes are ruled out as being insurance premiums rather than true state revenues, then the reliance of states upon commodity taxes of various sorts increases to over fifty per cent of total revenues Local governments have been more cautious about following this trend, but many municipalities are giving serious consideration to the possibilities of obtaining increased income from the broad base of commodity sales

Customs Duties.—Duties charged on goods imported or exported in the course of foreign trade have always proved both convenient and productive sources of public revenue Many of the more backward and smaller nations of the world are forced to depend almost entirely on these customs duties (as they are called) for revenue The Constitution of the United States forbids the levying of such duties by the states, and it limits the federal government to duties on imports The power so given to Congress is the legal basis for our protective tariff system There are two forms of customs duties—revenue duties and protective duties, giving rise to revenue tariff systems and protective tariff systems A revenue duty is one levied for the purpose of obtaining income for the government, without any intention of assisting domestic industry in its competition with foreign business interests. Such duties operate most successfully when levied on a few selected commodities not produced within the nation Since the duty tends to raise prices and thereby curtail demand for the product, revenue

tariff systems operate most successfully when placed on low-priced necessities, the demand for which will continue in spite of the tax placed upon them. If the product on which the duty is levied is produced at all within the nation, revenue duties will to some extent automatically give protection to domestic producers. This can be avoided, however, by the imposition of an internal excise tax equal to the duty, thereby equalizing the competitive position of the foreign and domestic producers. This was long the practice in England, where the ideal of free trade was until recently the accepted public policy.

As fiscal measures, customs duties are of questionable merit. The flow of income secured is very irregular and difficult to correlate with the government's needs. Also, every change made in the duties charged tends to dislocate home industry, since the degree of protection afforded is thereby varied The advantages of customs duties rest in their satisfaction of the administrative requirements of a good tax. They are certain in time and manner of payment, as well as convenient and relatively cheap of collection Since the duty is paid finally by the purchaser of goods in the form of higher prices, the burden falls lightly in small amounts, and is usually paid without the citizen being conscious of the fact This last advantage looms unfortunately large in the minds of legislators when enacting new tax legislation

Excise Taxes.—Taxes on commodities or services produced or exchanged within a country may be called *excise taxes,* to distinguish them from customs duties, which are levied on commodities at the time of their movement into or out of the country However, the term excise has come to be used very loosely in tax legislation and literature, largely for reasons of constitutional law There is a mandate in the federal constitution to the effect that all direct federal taxes must be levied in proportion to the populations of the several states This is an awkward limitation which can best be avoided by construing as many taxes as possible to be indirect Excise taxes on such commodities as tobacco, liquors, and certain luxuries have been classed as indirect by the courts, because they are shifted from the producer or seller against whom they are levied to the next stage of production or to the final consumer This has led to a tendency to stretch the legal concept of an excise to cover more than commodity taxes Licenses to do business, and even gross income taxes, have been called excises in federal and state tax statutes The confused use of the word is unfortunate because there is need for a term to denote internal taxes on specific goods or selected groups of goods The term excise tax should be reserved for this purpose; hence the definition given above. Gasoline taxes, amusement taxes, transportation and communication taxes all fall within this meaning

Sometimes the excise tax is collected by the sale of revenue stamps

attached to the article. This simplifies collection, for every person who handles the taxed object becomes an unofficial government inspector, who can tell at a glance (by the presence or absence of the stamps) whether the tax has been paid. A second method of collection is to require business firms to report their sales periodically. This method tends to encourage dishonest reporting, and usually leads to some evasion of the levy.

The fiscal advantages and disadvantages of excise taxes are almost identical with those of customs duties, and the economic effects are about the same in both cases. The tax is administratively satisfactory, for it is cheap, convenient of payment, and yields large revenue. The burden on the taxpayer falls in very small amounts spread over numerous purchases. The serious weakness is its lack of conformity to the principle of ability to pay. The major portion of the tax is passed on to the consumer, and is regressive, for the reason explained above. However, if the goods taxed are strictly luxury items that are consumed mostly by the rich (which is seldom the case), there may be an element of progression in it. The burden placed on the industries affected is very heavy at the time the tax is first assessed, but in time they readjust themselves to the new conditions, and by shifts in prices and incomes in the community, the burden tends to be diffused. Just how this will work out depends largely on the elasticity of the demand for the commodity taxed, as explained in the preceding chapter. To be most effective, excise taxes should be placed on a few commodities that are very widely sold, and that have a rather inelastic demand, so that sales will not be cut too sharply by a slightly higher price. In time of war the list of commodities subject to excise taxation expands and the rates rise sharply. Luxuries are subjected to especially high rates. The objectives of inflation control and curtailment of the use of scarce productive agents in nonessential lines become just as important as the revenue obtained.

The General Sales Tax.—Critics of our present tax system have suggested as an alternative, especially for the income tax, a general tax on all sales at a uniform rate. Such a tax would really constitute a universal excise tax. The arguments in favor of this tax are: it is simple of operation; the burden is slight, because it is paid in small amounts; it is not class legislation, but affects all persons; and it would yield a very large revenue. The defects of the sales tax, however, far outweigh the advantages. It ignores completely the principle of ability to pay, for it is based on the taxpayer's expenditures rather than his wealth or income, and it is therefore regressive. The burden of it falls unequally on different industries. If the tax is levied on *every* sale, then a commodity, the manufacture of which requires the raw material and semifinished product to pass through the hands of many enterprises, would bear a much higher total tax than a commodity which, in the course of its production, passes through very

few hands. Integrated industries would have a great advantage over non-integrated industries. To avoid this difficulty, some writers have suggested that the sales tax be levied only once for each commodity, just before it passes into the ultimate consumer's hands.

The federal government has successfully resisted the pressure for a general sales tax, but state governments and a few cities have used the levy as a means of reducing the burden on property and at the same time avoiding income tax legislation. About half the states have adopted some form of the general sales tax. The coverage varies, for certain exemptions usually are made. Some states exempt specified groups of commodities, such as food products and materials sold to farmers—seed, feed, and fertilizer. Many exempt certain listed institutions, such as those of a religious, charitable, or educational sort. The most common rate for the tax is 2 per cent.

In the opinion of the present authors, the regressive feature of the sales tax is a serious defect. A state income tax with much lower exemptions and credits will reach the mass of taxpayers in a more equitable manner. Such a tax should be integrated with the federal income tax, and provide for tax sharing by local governmental units. It is along these lines that state tax systems should be developed.

The General Property Tax.—One of the oldest and most widely used taxes in the American tax system is the general property tax. The tax is levied upon the assessed value of all property within the jurisdiction of the state or city. Property is divided into two categories, real estate and personal property. Real estate includes land and improvements thereon, especially buildings. Personal property includes all forms of intangible property, such as stocks, bonds, and mortgages, as well as tangible property, such as household furniture and automobiles. The rate of tax is customarily a uniform flat or proportionate rate. Very rarely is the tax made progressive. The methods of administration differ in different sections of the United States. Usually the assessment of the property is in the hands of local assessors. If the taxpayer objects to the valuation placed on his property, he may appeal to a local board of review; in some states he may carry his case still higher to a state board. The valuation made by the local assessor serves as a basis for both the state and the local tax. In some states the state authorities agree on a flat rate (for example, 5 mills), which is then added to the local tax rate in every part of the state. In other states, the state authorities decide on the required revenue and apportion the total among the various local units, leaving each unit free to determine the local rate necessary to raise its share of the state tax burden.

In origin, the general property tax was an attempt to adjust the tax burden on the basis of ability to pay. The property a man owned was considered an excellent criterion of his ability to assume the tax burden, and this probably was a close approximation to the truth a century ago.

Wealth at that time consisted almost entirely of land, buildings, cattle, and similar property that could not be hidden from the eyes of the tax collector. With the development of industrialization and the accumulating mass of intangible forms of private property, the defects of the general property tax became more pronounced. As noted above, these intangibles have caused it to become a flagrant source of double taxation.

Defects of the General Property Tax.—While the general property tax is the most widely used tax in the United States, it is at the same time the most widely condemned. The economist Seligman, a foremost authority on taxation, concluded that "The general property tax as actually administered is beyond all doubt one of the worst taxes known to the civilized world. . . . The general property tax is so flagrantly inequitable that its retention can be explained only through ignorance and inertia."[12]

The most serious defect of the tax is the inability to obtain just assessments of the value of real estate. Since the tax is based on the value of property, justice demands accurate assessment, but in practice inequality of assessment is so extensive that it borders on the ridiculous. The assessments are unequal as between individuals in a given locality and as between different sections within the same state. The local assessors are untrained men, appointed for political purposes rather than ability, and the combination of ignorance and favoritism results frequently in assessements of from less than 25 per cent to more than 75 per cent of the actual market value within the boundaries of the same town. Property of great value is likely to be assessed proportionately much lower than property of small value. The effect of this is to make the tax regressive; that is, the greater the value of the property the lower the actual rate of tax paid. As between sections of a given state, injustice results from the use of the same assessment (made by the local assessors) as a basis for both the state and the local tax. If the state tax is a uniform rate on all property, there is a strong inducement for local assessors to assess local property at a very low rate, in order to reduce the burden of the state tax. The local governmental unit can make up the deficit that would otherwise occur in its own revenue by raising the local tax rate in proportion to the reduced assessment.

A second defect is the impossibility of enforcing equitably a tax on personal property. Personal property, especially in the form of stocks, bonds, and mortgages, can very easily be hidden, and it is impossible for a tax collector to know just what the personal property holdings of a taxpayer may be. Reliance must be placed on a personal declaration, and this places a premium on dishonesty. The tax is widely evaded through under-valuation of personal property and through failure to report.

Finally, the general property tax does not today conform to the ability-

[12] Edwin R. A. Seligman, *Essays in Taxation* (1915), p. 62.

to-pay principle. The burden of taxation is placed unfairly on persons who own property, as contrasted with those who do not. The evasion of the tax on personal property also causes the ability-to-pay principle to be violated, for it means that the holders of real property pay higher taxes than the holders of an equal amount of personal property. Socially, this is especially serious, because small property owners usually hold real estate for the most part, while large property owners usually have the major portion of their holdings in the form of intangible securities.

Reform of the General Property Tax.—While the defects of the general property tax just indicated are quite commonly admitted, government officials have been reluctant to give it up. The revenue obtained is steady and large and, as we have already observed, a tax on land cannot be shifted. Attempts at reform of the general property tax have been largely in the direction of the classification of various kinds of property, with tax differentiation for the various classes. The classification movement has made rapid progress. Two-thirds of the states have constitutional provisions authorizing property classification and rate differentiation. In many of these states, intangibles are classified separately and taxed at a lower rate than real estate. Many states have sought to improve administration by various reforms. Equalization boards have been established to equalize assessments between different localities, and in some states these boards have been given real power to accomplish their purpose. There is a decided tendency toward more and more centralization of state control in the administration of the tax. One factor forcing this reform has been the growth of large business units. Corporations and railroads owning property all over the state cannot be satisfactorily valued piecemeal by each individual local authority.

If the property tax is to be retained, it should become frankly a real-estate tax, and assessment should be placed in the hands of trained assessors operating under the civil service. The method of assessment should be based on a scientific system of land valuation, and the land should be assessed separately from the buildings on it. If possible, the administration of assessment should be controlled by the state government. Only by such methods can justice be approximated. The separation of state and local sources of revenue might also be of assistance. The real-estate tax is peculiarly adapted to the securing of revenue for the local governmental units; the state can obtain its revenue from other sources. Since the income from land is largely unearned, the tax on land, as distinguished from taxes on improvements to land, should be increased, as suggested in Chapter XXIII.

Death Taxes.—Taxes levied on the transfer of property at the death of the owner may be either of two sorts: (1) taxes on the total estate before transfer to the heirs, or (2) taxes on the shares inherited by each of the individuals to whom a bequest has been made. The first type of death tax is called an estate tax and the second is known as an inheritance tax.

Death taxes have won the unanimous support of authorities on public finance—a degree of approval exceeding that accorded to any other tax. The tax is defended on general social and economic, as well as fiscal grounds. One reason why this tax is held to be socially desirable is that it checks the tendency towards increasing inequality of wealth, as was shown in Chapter XXIII The perpetuation of large estates from generation to generation is restricted. It also protects children from the misguided affection of their parents. Moreover, the state is entitled to a share in every man's fortune, because without the protection to property given by the state, and the various other helpful institutions fostered by it, the fortune could never have been accumulated The educational training one secures, the business associates with whom one works, the protection of the government under which one lives, the support of closely allied industries, the use of the monetary and banking systems, and similar factors, all contribute to the accumulation of riches. The fiscal arguments in favor of the death tax relate to its merits as a revenue producer. The tax conforms to all the principles of a good tax, administratively. It is certain in time and manner of payment, convenient of payment, and cheap to collect. It conforms splendidly with the ability-to-pay principle, for there is no time in one's life when one is in a better position to pay a heavy tax cheerfully than when he receives a pure windfall in the form of an unearned inheritance. Finally, as stated above, the tax yields a large revenue

In answer to these arguments, the critics of death taxation claim that both socially and fiscally the tax is of questionable value. Looking at the social aspects, it is asserted that the natural right of private property is infringed by the tax, and that a tendency to dissipate the capital of a nation results, because people will tend to be less thrifty and save less if they know that their estate is to be taxed heavily on their death It is said to be faulty from a fiscal point of view, in that (1) the tax is easily evaded by the transfer of property before death; (2) it falls unequally on different accumulations, for it is based on the arbitrary act of transfer, and one estate might change hands several times while another estate is transferred but once; and (3) the yield is very irregular, while the needs of the government for revenue are regular These arguments against death taxes are very weak. We no longer allow the appeal to so-called "natural" rights to interfere with the welfare of the state[13] The tendency to discourage thrift is probably greatly exaggerated, for the desire to pass on a large estate to one's heirs is only one of many strong incentives that lead men to amass wealth Bachelors seem to seek riches with as much effort as do married men with dependents! In fact, it may well be that the existence of a death tax may induce some people to accumulate more money than they otherwise would,

[13] See *supra*, Chapter XXIII, for a discussion of natural rights as related to the ethics of inheritance

since they know that their estate will be reduced somewhat when it is transferred to their heirs. The difficulty of evasion can be reduced by the placing of a tax on gifts equal in rate to the tax on inheritances. At present, the rate of the federal gifts tax is equal to three-quarters of the estates tax. Moreover, one may well doubt whether the policy of giving away one's fortune in anticipation of death will ever be generally adopted The average person does not contemplate death in the immediate future The apparent inequality of treatment growing out of the difference in the number of times various estates change hands results from failure to remember that the tax falls on the *person receiving a bequest,* not on an inanimate entity, an estate. No one *person* is taxed more often than another. The irregularity of the yield would be serious if the inheritance tax were the only tax, but since it is simply a part of a large, intricate system, this objection loses much of its force.

The Federal Estate Tax.—Since 1916 the federal government has collected a tax on the transfer of decedents' estates. The levy applies to the estate as a whole, after deducting an exemption of $40,000. The rate is graduated from 2 per cent to 77 per cent, depending upon the size of the estate. As in the case of the income tax, each of the successively higher rates applies only to the amount within the individual brackets. A deduction is allowed for state inheritance taxes paid, up to 80 per cent of the federal tax that would have been payable under the 1926 federal tax. The effect of this awkward provision is to place pressure on the states to levy death taxes at least equal to 80 per cent of the federal schedule prevailing in 1926. At the same time, it is a compromise solution to the problem of double taxation of bequests Other allowable deductions include funeral and similar expenses, and special bequests for charitable, educational, and religious purposes. While, for all practical purposes, the federal estate tax is a direct tax on the heirs, the tax has been upheld as constitutional on the rather dubious interpretation that it is an indirect tax levied on the estate before it is transferred.

State Death Taxes.—The federal allowance for state death taxes has caused the use of this source of revenue to spread to every state but Nevada. In form, these laws differ quite widely. A few are estate taxes, similar in construction to the federal estate tax, while others are constructed on the basis of the individual shares inherited. For direct heirs, the rate of tax is usually low, but for collateral relatives, or heirs unrelated to the deceased, the rates are customarily higher and steeply progressive. Small bequests are customarily exempted, as are also bequests for charitable, educational, or religious purposes. Since the state laws are far from uniform in construction, and since each tries to secure revenue from as broad a base as possible, very serious conflicts of jurisdiction have resulted, causing great confusion in the settlement of estates. There is much to be said for the restriction of

death taxes to the federal jurisdiction. State revenues from this source have not been large, and the extreme irregularity of the yield is especially unfortunate in its effects on state financial programs.

Social Security Taxes.—The broad social security program upon which the United States embarked in 1935 has already been described in Chapter XI. A by-product of the program was the introduction of three new taxes into the revenue systems of the federal and state governments. Two of these taxes, a wage tax paid by the employee and a payroll tax paid by the employer, were designed to finance a national program for old age insurance. The third tax, also paid by the employer, was levied to meet the cost of unemployment insurance. The wage tax is deducted from employees' pay, and was originally intended to start at one per cent and increase one per cent every three years until a maximum of three per cent would be reached. The employer's share of the cost of old age pensions was to be equal to that of the employee. Congressional action postponed the planned increases, so that the rate on both taxes has remained at one per cent (1947). The third tax, assessed to finance unemployment insurance, started at one per cent when the plan was initiated and was subsequently increased to the present three per cent rate.

Since these new taxes are all based upon total wages paid out, they are popularly known as payroll taxes. The yield has been enormous, and hence sufficiently important to cause considerable controversy over the shifting and incidence of the levies. The intent of the legislation is quite clear; only the direct deduction from wages was to fall upon the workers' income. However, since the labor cost per employee is increased by all three taxes, it is reasoned by some theorists that the workers bear the major burden of the total costs of the program, because higher labor costs must affect the employment of marginal workers. More important are the inevitable effects of these taxes upon the whole question of fiscal policy in relation to full employment. Collections will be very heavy in good times, while in depressions the unemployment benefits paid out by the government will probably exceed the amounts taken in. This stabilizing element must be of very real importance. We have already met with this in Chapters XI and XIII, and we shall meet with it again in the next chapter, where fiscal policy is more fully discussed.

Special Business Taxes.—The American tax system, especially within state boundaries, contains a bewildering array of special taxes directed against the operation of specific businesses, or the right to do business, which are most conveniently designated as special business taxes. These taxes are not of minor importance; almost 12 per cent of all state revenues came from them in 1941. In 1942 Alabama had over 130 separate occupational taxes, ranging from those levied against dealers in coffins to those

assessed against persons engaged in the practice of medicine[14] Fees for granting corporate charters are very general Special taxes are levied against chain stores, public utilities, insurance companies, banks, and various others We cannot cut a path through this wilderness of taxation in this chapter, it is a challenge for a tax specialist The chaos should be cleared up by measures of simplification, integration, and cooperation among conflicting tax jurisdictions.

Summary

In framing a tax program, political and economic considerations are so entangled that some compromise with what is theoretically desirable is necessary The chief sources of government revenue in this country are for the federal government—income, profits, excise, death, and social security taxes; for state governments—motor fuel and other excise taxes, and also payroll and special business taxes; for local governments—the general property tax Multiple taxation and conflicts of jurisdiction among these taxing authorities create serious problems, which can be best solved by tax sharing and grants in-aid.

Our federal government taxes both personal and corporate incomes The personal tax is on net income, calculated by subtracting certain exemptions credits and deductions from gross income, and taxed progressively by a combination of normal and surtax rates. The more important problems of income taxation concern the definition of income, the method of taxing capital gains, the dubious wisdom of taxing corporate incomes, the burden on irregular incomes, and the size of the net tax base Taxing corporate incomes is open to question because it involves double taxation, is not in accord with ability to pay, and is a means of evading high rates on personal incomes A tax on undistributed profits might afford a good compromise here Profits taxes are more equitable, and they yield good revenue and help curb inflation in wartime; but they are hard to collect in peacetime, they do not distinguish monopoly gains from those of efficiency, and they discourage venture investments.

The use of various commodity taxes is growing, except for customs duties Customs duties and excises are easy to collect and convenient in manner of payment, but they distort the pattern of industry and are regressive The increasingly used general sales tax is likewise objectionable because of its regressive character The general property tax is considered the worst in our revenue system because of inequitable assessments, evasion of the tax on intangible personal property, and failure to conform to ability to pay It could be improved by restricting it to real estate, with a scientific method of land valuation and assessments by trained experts. Death taxes are good because they are based on ability to pay, they help to check large

[14] Harold Groves, *Financing The Government* (1945), p 256

fortunes, and they are easily administered. The federal estates tax is levied on decedents' estates as a whole, while in most states the tax is on inheritances (individual bequests). Social security taxes consist of a wage tax and two payroll taxes. The incidence of these taxes is not clear, but probably falls mainly on employees. State tax systems contain a wide variety of business taxes, which need simplification.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

The general texts on public finance listed at the end of Chapter XXIV were primary sources for material used in the present chapter. This was especially true of Harold Groves' *Financing the Government* (1945) and Alfred G. Buehler's *Public Finance* (1936). For factual and statistical material, we have relied heavily upon the National Industrial Conference Board's *The World's Biggest Business, 1914-1944;* that volume is a mine of information. E. R. A. Seligman's classic *Essays in Taxation* (1931 edition) remains the foundation of any study of tax systems.

Our evaluation of individual taxes, together with recommendations for reform, were considerably influenced by the following: a report on "Model State and Local Tax Systems," in *Proceedings of the National Tax Association* (1919); *Facing the Tax Problem,* by The Twentieth Century Fund (1937); Harold Groves' *Production, Jobs and Taxes* (1944), and the same author's *Essays in Taxation,* to be published in 1947 by the University of Cincinnati Press. Any analysis of current tax systems must draw upon periodical material dealing with specific taxes and tax problems. The most fruitful sources for this material are the publications of the National Tax Association, the Tax Policy Institute, and the Committee for Economic Development (CED).

CHAPTER XXVI

Public Borrowing and Fiscal Policy

A. Public Borrowing

The Scope of This Chapter.—In Chapter XXIV we observed the expanding field of public finance. The extension of the functions of government has included not only broader activity in such areas as the regulation of business, expansion of public works, and social security, but has now reached a place where the government is accepting responsibility for maintaining economic stability and full employment. This vigorous demand for conscious effort directed toward the maintenance of stability in our economy has revolutionized the conception of public fiscal policy. Taxation, expenditures, and the national debt have become instruments for positive economic control. Alteration of the tax system is recommended in order to provide incentives to business; expenditures are specifically designed to support activity in certain industries such as housing; and public borrowing and spending are advocated as means of increasing the circuit flow of money in times of threatened business recession.

The object of the present chapter is to explore the requirements for sound fiscal policy. Since the core of the problem is in the manipulation of the public debt, we shall first examine the mechanism of public borrowing.

The Growth of Public Debt.—Practically all the units of government, from the federal government down to the smallest township, make use of borrowing as a source of public funds. The extent of borrowing by the federal government is indicated by the table on the next page.

The powerful influence of war financing on the public debt is demonstrated by the increase from 1910 to 1945, the period in which the two world wars occurred. The considerable reduction from 1920 to 1930 gives evidence of a salutary policy of debt retirement. Refunding operations of outstanding obligations during that period also improved the financial position of the federal government by reductions in interest rates and by the rearrangement of maturity dates. The extensive depression financing of the 1930's is evident in the rise in the public debt to its highest peak in history prior to the outbreak of the Second World War.

The tendency towards increasing public indebtedness has not been restricted to the federal government. State government indebtedness increased from \$274,746,000 in 1880 to \$2,360,958,000 in 1932; the per capita

GROSS FEDERAL PUBLIC DEBT FOR SELECTED YEARS [1]

Year	Total debt (In thousands)	Per capita debt
1880	$ 2,090,909	$ 41.69
1890	1,122,397	17.92
1900	1,263,417	16.56
1910	1,146,940	12 69
1920	24,299,321	228.33
1930	16,185,310	131 49
1940	42,967,531	325.63
1945	258,682,187	1,853 01

state debt increased from $5.48 to $19.07 in the same period. The gross state indebtedness increased slowly after 1932, reaching its highest point in 1940 ($3,514,200,000) War years brought a gradual decline in the total. The public debt of local governments, especially cities, increased very sharply up to 1931. For 146 cities with populations over 30,000, the per capita public debt increased from $44.71 in 1903 to $159 70 in 1931. In the early years of the 1930's, the local gross debt of cities declined with marked rapidity, and remained fairly stable after 1937.

European nations show a similar trend. From 1914 to 1919 Great Britain increased its national debt more than elevenfold. In the same period the French national debt increased almost fivefold. By the end of the Second World War the debt of Great Britain was more than double the 1919 figure.

Public debts are based upon the credit of the governmental units concerned. These units have promised to pay certain sums of money on specified dates in the future. The obligations are similar to those of private individuals or corporations, except that the creditor cannot enforce repayment of the principal in case of failure on the part of the governmental body to meet its commitments. A state is a sovereign power which cannot be sued without its consent. The only security the creditor receives is the taxing power of the state, its good faith, and its desire to maintain a good credit rating in case of need for further borrowing.

The Reasons for Public Borrowing.—The wide variety of purposes that give rise to public borrowing may be conveniently grouped into four broad classes: (1) temporary financing; (2) the financing of public works; (3) emergency financing; and (4) full employment financing.

Temporary financing refers to the practice of meeting short-time credit needs by the issuing of short-term credit instruments. They are employed to smooth out irregularities in the flow of, and need for, income. At times,

[1] Secretary of the Treasury, *Annual Report* for 1945, pp 531-532 The data are for fiscal years ending June 30

the actual revenue received by a government is not as great as was anticipated; or perhaps expenditures are greater than had been expected. In either case, short-time loans are authorized to finance the deficit until a readjustment of taxes can restore the balance between income and expenditure. Short-time obligations are also used to anticipate income from taxes or bonds. Taxes are often paid annually, or semiannually, and receipts from bond issues come in practically all at one time (i.e. when the bonds are sold). The government needs its revenue, however, in recurring amounts spread over a period of time. The use of short-time obligations helps to reconcile irregular receipts with the recurrent need for income. The banks, and to some extent the general public, buy these short-time obligations quite readily, at low rates of interest, since they constitute a very safe investment for funds which the investor does not wish to tie up permanently, but desires to keep in as liquid a form as possible.

To embark on new *public works,* governments often find it necessary to borrow the funds required. The public works projects are of two general types—those that yield money income in the future, and those that do not. To acquire ownership of its own public utilities, such as gasworks, waterworks, electric power plants, or streetcar lines, municipalities must borrow funds with which to build a plant, or to purchase a plant already in operation under private enterprise. State governments have aided in the construction of railroads, irrigation projects, and toll bridges; also, in a few instances, they have operated banks, warehouses, insurance departments, and other enterprises. Ventures of the federal government in this direction include the post office, the Panama canal, the Tennessee Valley Authority, and the government-owned railroad of Alaska. Public works that do not yield a money income include roads, streets, schools, hospitals, charitable institutions, and public buildings. Although these contribute real income to the community, they do not add directly to the monetary revenues of the government.

Borrowing for public works has a legitimate place in the financial system of any governmental unit, provided it is done judiciously. Such works necessitate expenditures that are both large in amount and irregular in occurrence. The normal receipts from taxes may be insufficient to supply the funds required. Where the works yield a monetary income, interest on the sums borrowed and repayment of the principal should be paid out of these earnings, unless for special reasons it is decided that social welfare is better served by running the enterprise at a loss, meeting the deficit out of taxes. The latter is a dangerous practice, however, to be resorted to only with great caution. Where the project yields no monetary income, the rule is that the period of the loan should not exceed the life of the improvement. To issue twenty-year bonds to pay for the building of a city street that will only last half that time is not sound financing. Also, where possible, a "pay

as you go" plan is better. In a large city, the needs for new schoolhouses and new streets are fairly regular and predictable each year; the ordinary tax system should be so constructed as to take care of these annual improvements out of current revenues.

Emergency financing refers to unexpected needs for large sums of money as a result of some national calamity. The waging of war and the repairing of such disasters as floods and earthquakes give rise to immediate needs for funds much greater than existing tax systems would yield. Borrowing makes the needed funds immediately available, and the indebtedness can be repaid out of taxes gradually over a period of time. The problems involved in this type of borrowing are best illustrated by the financing of a war, which will be discussed below in greater detail.

Full employment financing refers to the use of public borrowing as a device for increasing the supply of money with the objective of increasing (or maintaining) a high level of money incomes and thereby achieving economic stability and full employment of men and resources. This is the familiar theory of deficit spending—the financing of relief and public works by borrowing through the banking system. Public borrowing with this intent must be sharply distinguished from the borrowing for public works explained above. In the first case it is the need for the public improvement that gives rise to the borrowing. In the present case it is the desire to maintain the level of money incomes that supplies the primary motivation. It is at this point that the heat of controversy over fiscal policy, referred to in Chapter XXIV, reaches its highest point.

The Forms of Public Borrowing.—The forms which government evidences of debt may take are short-term bills, short-term notes, bonds, and paper money. Short-term certificates are issued for periods varying from one day to five years. The United States federal issues for a year or less are known as Treasury bills, while the one to five year issues are called Treasury notes. Bonds are issued for much longer periods. It is in this last form that most public borrowing takes place. Bonds vary in the length of their period to maturity, and in their interest rates, negotiability, and other features.

The issuance of paper money, while not popularly so considered, is a form of public borrowing. The government is paying for goods and services secured with printed notes which usually are promises to pay standard money some time in the future. When a government prints an issue of paper money and uses it to meet its financial obligations, it is in effect forcing the general public to loan goods and services to it without interest.

The Sources of Public Loan Funds.—Government bonds and other evidences of indebtedness are sold to the general public, and to insurance companies, savings banks, and commercial banks. Funds for purchases by all but the last group (commercial banks) come primarily from savings out of current income. Funds that would have been put into private invest-

ments or purchases of consumer goods by the holders, flow instead into the hands of the government. The net effect upon total national saving and investment depends upon the disposition of the funds by the government; new public works may come into being, or payments may be made for poor relief, military supplies, or other purposes.

Purchases of government bonds by commercial banks present a very different picture. A bank can buy government bonds and pay for them with newly created demand deposits; the bonds add to the assets of the bank, and a new demand deposit is credited to the government in the liability column. An expansion of the money supply results, for the deposit circulates from bank to bank by means of checks and the facilities of clearing houses. We arrive at the important conclusion that the purchase of government bonds by the general public or by savings institutions merely transfers purchasing power, but purchases by commercial banks create new purchasing power and are a source of inflationary pressure on prices. It is estimated that as of September, 1945, thirty-two per cent of our national debt of 260 billion dollars was held by commercial banks; federal reserve banks held another nine per cent; individuals and corporations held thirty-four per cent; and government agencies, insurance companies and savings banks held the residual twenty-five per cent.[2]

Tax-Exempt Securities.—In order to stimulate the purchase of their certificates of indebtedness, especially bonds, governments frequently adopt the practice of issuing such securities partly or completely free from subsequent taxation. The issuance of securities exempt from taxation, in whole or in part, permits their marketing at lower rates of interest than would otherwise be possible, giving the government an advantage over private enterprises in the competition for the loanable funds of the community. It also reduces the amount of money that must be raised by taxation to meet the annual interest charges. Recent issues of the federal government are subject to federal income taxation, but all federal issues are exempt from state taxation and all state and local issues (estimated at about seventeen billion dollars) are exempt from federal taxation. The controversy over the desirability of issuing tax exempt securities, therefore, has centered lately around the bonds of state and local governments. The Supreme Court of the United States has ruled that the federal government has no constitutional right to tax state and local obligations; the interest paid to the holders of such securities is therefore free from the federal income tax.

The principal criticisms directed against the issuance of tax-exempt securities are three in number. Firstly, it is said that the purchase of these securities supplies an avenue for evasion of the surtaxes levied under the federal income tax. To the citizen with a small net income, there is no advantage to be gained from the purchase of a government bond paying a

[2] *United States News*, March 1, 1946, pp. 32-33.

low rate of interest, and possessing the tax-free feature; but to the rich citizen, whose income is large enough to be taxable in part at the high progressive rates which now prevail, worthwhile saving results. Secondly, some federal officials have asserted that capital is diverted by such securities away from productive private enterprises to nonproductive public expenditures. Finally, it is charged that the ease with which tax-free securities can be issued stimulates extravagance on the part of state and local governments. As to the first of these objections, the evasion of income surtaxes by the rich, through the purchase of tax-exempt securities, is probably not serious. Approximately half the outstanding issues are held, not by rich taxpayers, but by such organizations as insurance companies, banks, and surety and bonding companies, that are restricted by law to certain types of investments which include government bonds. Also, the low rates of interest now being paid on its bonds by the government compensates to some extent for some possible loss of surtax revenues. The argument that capital is diverted into nonproductive channels is fallacious almost to the point of absurdity. Surely the building of bridges, roads, and schoolhouses is just as productive as the manufacture of perfumes, victrolas, radios, and automobiles! The distinction between productive and nonproductive activity must be made on a very different basis from that of the undesirability of public, as compared with private, enterprise.

However, tax-exempt securities do constitute a weak link in our fiscal system. They interfere with the operation of one of the most desirable features of the federal income tax—its conformity with the ability-to-pay principle. This special privilege should be eliminated, if necessary, by the passage of an amendment to the federal Constitution permitting the federal government to tax state and local bond issues. Such action would have the dual effect of adjusting the tax burden more fairly and supplying a healthy check on rash expenditures on the part of local authorities.

War Finance.—Every war in which the United States has engaged has been partly financed on borrowed money. This is also true of the wars fought between European nations. Four possibilities are open to a government seeking to finance the conduct of a war. Firstly, much of the revenue can be raised through taxation Secondly a large part of the needed funds can be obtained by direct borrowing, through the sale of bonds to the general public and to the banks. Thirdly, the government can resort to issues of paper money, which is really a kind of indirect borrowing. Finally, a combination of two or all three of these can be used. The immediate result is the same in any case, for either taxes, loans, or paper money issues give the government possession of immediate purchasing power with which it can secure economic goods and services required for the

waging of the conflict. The effects over longer periods, however, are quite different.

The use of direct borrowing to finance wars has many decided advantages. Most important of these is the speed with which the required revenue can be obtained. To construct, put into operation, and collect taxes requires many months, if not several years. The sale of bonds gives revenue at once. Secondly, the borrowing of money gives the government command of idle liquid funds, free for investment, while taxes must often fall on functioning productive enterprises. Thirdly, borrowing increases the flow of money incomes and thereby aids the economy to reach full employment rapidly. Fourthly, if bonds are very widely sold, they increase public interest in the conduct of the war. This assists in gaining support for the administration's policies, and at the same time brings about an immediate curtailment of consumption, for many persons who buy the bonds obtain the money to do so by reducing their personal expenditures. Taxes have the same effect, of course, but they operate more slowly. Finally, the heavy tax burden that it would be necessary to place on the community to finance a war completely by taxes would create popular dissatisfaction and would have an unfortunate effect on the morale of the people. Persons who object bitterly to taxes buy bonds willingly.

Paper money issues are usually regarded as loans because in most cases they take the form of government promises to redeem them eventually in some kind of standard money (such as gold). They are indirect and involuntary loans, more or less forced on the people, who, in accepting them, are really giving up goods to the government. The government buys goods with the newly issued notes, then prices rise as a result of the increase in the monetary circulation, so that the noteholders cannot buy as many goods with their money as they could before. The result is that, in effect, they are giving up goods in exchange for government promises. With the disappearance of the gold standard in most countries, the paper money has less and less the character of a promise to be eventually redeemed, and becomes merely a set of counters, or accounting units. Indeed, the "notes" may not even have a promise of any kind printed upon them. In this case, they really constitute a kind of tax. We learned in Chapter XIV that the use of paper money in the past has been so much abused, leading to drastic inflation and subsequent chaos, that it is frowned upon as an undesirable means of war finance, to be used only as a last resort.

Those who favor the use of taxes to finance a war have very strong arguments on their side. The use of bonds adds to the cost of war. The bonds must be repaid in the end anyway, and meanwhile additional costs are incurred. The total interest charged during the life of the loan sometimes amounts to a sum greater than the principal. The administrative

cost, both of floating the loan and of collecting taxes later to pay it, adds to the expense of financing. The use of bonds and paper money tends to raise the general level of prices. This means that the government is constantly being forced to pay higher and higher prices for the products which it purchases, making necessary successively greater issues of bonds or paper, so that dangerous inflationary pressure is generated within the economy. Taxes can be collected more easily under the wave of patriotism during the war, while an increase in taxes following the war may cause popular resentment. Finally, a tax system constructed gradually during the war is more apt to distribute the burden justly than would a tax devised after the war. This is because certain economic classes, chiefly business enterprisers, gain financially because of war, and these classes can be heavily taxed on the ground that they must not profit unduly while others are giving their lives for the national safety.

When the two sides of the case are balanced, it appears that the best system of war financing is one that relies mainly on taxation, resorting to borrowing only where further taxation would be clearly inexpedient. Taxation should be made use of right at the start of hostilities, and should be gradually increased while the war spirit runs high. Some borrowing is justified to obtain immediate funds, and to avoid disturbing the economic organization of the nation unduly. Also, within limits, public opinion must be taken into consideration. It is impossible to lay down any more definite rules than these. Each emergency has its own peculiar characteristics.

After full employment is reached, such borrowing as is necessary should be noninflationary. Keynes has suggested that a plan of compulsory saving might accomplish this end. If the public were compelled to buy bonds through the mechanism of payroll deductions, purchasing power would be drained off during the war, and after the war a well thought-out system for repayment would cushion the readjustment by increasing the funds available for private consumer purchases when recession threatens. This plan of deferred spending was partially tried in Great Britain in the Second World War. It deserves careful study for possible use in future emergencies.

Shifting War Costs to the Future.—There is a widespread notion in time of war that if the funds for financing the conflict are borrowed by the government, instead of taken from the people in taxes, the costs will thereby be postponed to the future. Now this is true only in a limited sense. A major war involves a strenuous effort by the whole people. It requires ships, airplanes, tanks, guns, ammunition, food and clothing for the army and navy, and a host of other things. The real costs of providing these things consist of resources used up and labor performed. These costs must be met somehow at the time when the war production is actu-

ally going on. If the goods can be obtained outside of the country and financed by bond issues sold to foreigners, then the costs can indeed be postponed until the time for repayment of these loans arise. During both the First and the Second World Wars, England and our other allies did postpone a considerable part of their costs by that means; they borrowed money from us and used the money to buy our goods. In that way, we carried a considerable part of their burden. But if the money is borrowed within the country that is fighting the war, and the goods are produced in that country, the costs are not postponed—they are met then and there in the course of current production. All that the borrowing does is to impose the money costs on people who buy bonds, instead of on those who pay taxes.

There are some real costs that remain after a war, and these must be paid out of postwar income. There is the burden of providing for the care and rehabilitation of disabled soldiers, and of maintaining dependent women and children whose husbands and fathers have been killed or incapacitated by their participation in battle. There is also the fact that much capital equipment has been destroyed or worn out during the conflict, without being replaced. Industry may work under a considerable handicap for some years before this equipment is restored. These things impose on the postwar nation both physical and financial burdens, but these burdens do not arise out of the debt. They are due to the physical destruction and depletion which the war leaves in its wake.

What, then, is the significance of public borrowing when the debt is held internally? At the time of the war, it enables the government to draw on the savings of those who have a surplus of financial resources, instead of taxing the people. The incidence of the war costs is thereby altered. After the war, as interest on the bonds comes due, it is paid to the bondholders out of taxes levied on the taxpayers, whoever they may be. To some extent the taxes may come from the bondholders themselves, who thus pay out with one hand what they take in with another, but a considerable part of the taxes is sure to come from nonbondholders. There is then a substantial transfer of income from nonbondholding taxpayers to bondholders. The transfer becomes very great when the principal of the bonds is repaid. If the war debt is large, there will be at this time an enormous redistribution of wealth. The mass of the taxpayers (in so far as they are not bondholders) are made poorer in order that the bondholders' claims upon the public treasury can be met.

Does the Size of the Public Debt Matter?—These considerations lead some economists to conclude that the payment of interest and principal on an internally held debt is of no great consequence from a national point of view. It amounts to no more than the taking of money out of one pocket and putting it into another. The total amount of national wealth

and income is the same after the transfer as before; it is merely held by a different set of persons. From this, some authorities go on to the extreme view that there is nothing to fear from a rising public debt; the possibility of its expansion is unlimited in the foreseeable future and can be viewed with perfect complacency.

Although it is true that the servicing of an internally held public debt is a matter of transferring payments from taxpayers to bondholders, it does not follow that this is a matter of no consequence. The working out of a suitable tax structure to meet interest payments on the bonds, and to provide for their eventual repayment, may be a difficult political problem. Also, the transferring of payments from taxpayers to bondholders involves some nice questions of social justice. If the payments are very large, these transfers may affect the pattern of income distribution very seriously; and if one class of people is taxed heavily to make these payments to the bondholding class, the burden on the former may be very real, and their reactions to it may entail important political consequences. It is not unlikely that the bondholders may be a relatively small group of rich people, and the taxes may fall most heavily on the masses of the relatively poor. If so, the burden on the latter group may be heavy enough to rouse great discontent. In an extreme case it can lead to open rebellion. There are potentialities for social revolution in such a situation. For all these reasons, expansion of the public debt cannot go on indefinitely, and such expansion is a matter in which caution should be observed.

It is impossible to say exactly how large a national debt can become before it reaches the danger point. Experts differ widely in their opinions on this matter. Some hold that a debt twice the amount of the national income is well within the limits of safety, and this is a fairly moderate position. Considering the various complexities involved, the present authors venture to set forth the following conclusions:

An increase in the national debt, within reasonable limits, is not per se a matter to be feared.

Every new increase in the debt should be clearly justified; the borrowing function can be dangerously abused.

A rate of increase in the debt no greater than the rate of growth of population and national income is within normal expectations, and an increase to an amount no greater than twice the national income is within the limits of safety.

The real impact of the public debt will depend upon how widely its ownership is distributed and the wisdom with which the tax system is formulated.

Borrowing by states and local subdivisions is more dangerous, because a considerable part of such debts is likely to be held outside the jurisdiction.

We shall return to this problem in a later paragraph, when borrowing for full employment is under consideration

The Discharge of Public Debts.—Once public debts have been incurred the problem of discharging them in the future must be considered. Here the alternatives are: to repay the obligation out of current revenues, to repay it with newly issued paper money, to repudiate it, or to renew it by issuing new securities. If repayment is to be made, funds must be gathered prior to the date of maturity to meet the heavy drain that will come at that time. One common practice is the use of a sinking fund; that is, a fund into which revenue is placed annually in certain designated amounts for the purpose of ultimate debt repayment. The use of such sinking funds has not been very successful. Public officials, especially in cities, have been lax about placing money in the sinking fund and have frequently been very unwise, if not dishonest, in the selection of investments while the fund is accumulating. A better practice is the issuing of serial bonds Under this plan, if a loan is for a certain period (say ten years), the maturity dates of the bonds are arranged in series, so that each year a certain portion (say one-tenth) will fall due This automatically reduces the obligation without the use of a sinking fund

Repudiation of outstanding debts is not unheard of. Several of our state governments have taken this reprehensible step. It amounts to confiscation of the bondholders' property, and the effect on public credit is disastrous

Repayment out of paper money issues virtually constitutes repudiation, in whole or in part, because as the quantity of money is increased, its value falls, so that the bondholders get back less purchasing power than they loaned Any governmental policy that encourages monetary inflation makes it easier to pay off the debt, because as money becomes more plentiful government revenues increase; but repayment under such conditions is more or less of a fraud perpetrated on the bondholders. If the debt burden is very heavy, it places a great temptation on the government to meet it in this way.

The renewal of a maturing obligation is frequently the easiest plan to adopt New securities can be issued and the proceeds used to meet the obligations of the old. This amounts to perpetuating the debt In Europe, especially in England, it is a common practice for governments to borrow funds for an unlimited period of time. This amounts to the sale of annuities; the government agrees to pay in perpetuity a specified sum of money each year Under such conditions no provision for repayment need be made The government can retire each year whatever portion of the outstanding annuities its surplus revenue warrants, but it assumes no obligation to do so However, this system has the defect of reducing the pressure on public authorities to retire the outstanding debt. There has

been a far greater tendency towards reduction of the public debt in the United States, where government bonds are not perpetual, than in Europe.

B. Fiscal Policy

Fiscal Policy Defined.—In its broadest sense, the fiscal policy of a government includes all matters that have to do with finance; such topics as monetary and banking policies, discussed in several chapters of this volume, may properly be included within the concept. The present section, however, will be concerned with fiscal policy in a more restricted sense. It deals with the use of public expenditures, taxation, and borrowing to promote prosperity, stability, and a high level of national income.

The Importance of Fiscal Policy.—It was explained in Chapter XXIV that all public expenditures, taxation, and borrowing have some effects upon the economy, regardless of whether that is the intent of the legislators. Purchasing power is transferred from taxpayers to others. Consumers' demands and the allocation of the factors of production are altered. A sequence of economic effects spreads out in ever-widening circles. Certain industries and localities expand, while others are retarded. In some cases the impact can be traced with reasonable accuracy, but in others the paths of shifting, incidence, and general effects are very difficult to follow.

When we consider how widespread are these influences, it is not surprising that fiscal policy is receiving a great deal of attention in these days of large government budgets. Conservative estimates of annual federal expenditures in this country for the years ahead place the minimum at twenty to thirty billion dollars. If we assume that our total yearly product will be somewhere around 125 billion dollars, it follows that one-fifth of the entire national income will pass through the hands of the national government. This places a very high responsibility upon the federal officials to formulate a wise fiscal policy.

Fiscal Policy and Full Employment.—In Chapter X there was described the new policy adopted by Congress in the Murray Full Employment Act of 1946, which made it the responsibility of the federal government to maintain full employment in this country. If this policy is to be carried out with determination, it will require certain measures of over-all economic planning, and a supporting fiscal policy. The government will presumably have to make sure that the total of money expenditures, both public and private, will always be large enough to make the demand for goods at cost prices adequate to employ the entire labor force. It is chiefly through fiscal policy that the volume of money expenditures can be controlled. The government can decrease or increase the amount of private expenditure by raising or lowering taxes, and it can compensate for a deficiency in private spending by expenditures of its own, financed by

borrowing. The weapons at the disposal of the government are thus two: (1) tax increases and decreases, (2) borrowing to make expenditures in excess of tax yields. It can (and presumably will) use a combination of both devices, as circumstances seem to require.

Taxation as a Weapon for Economic Control.—The fear that a recession in production would follow in the wake of the Second World War led to almost feverish study of the possibilities for control by the manipulation of taxes. The broad objectives sought by such controls were full employment and a stable price level. Less ambitious, but more specific, were such objectives as the stimulation of particular industries, retardation of other industries, and control of the location of industrial facilities.

The idea of control through taxation is not new. The Civil War tax of ten per cent on state bank-note issues was intended to eliminate that form of money and force the use of the new national bank notes. Taxes on liquors and cigarettes are motivated in part by a desire to restrict the consumption of these products. The federal Child Labor Law of 1919 (subsequently declared unconstitutional by the Supreme Court) attempted to prevent the use of child labor by assessing a ten per cent tax on the products of corporations violating provisions set forth in the act. The protective tariff is intended to stimulate the growth of certain industries.

Interest in control through taxation has been increasing. To stimulate the establishment of new industries within their borders, state and local governments grant various exemptions from taxes, usually from the general property tax. One fourth of the states have statutes or constitutional provisions that grant tax exemptions for homesteads. Professor Hansen has suggested that anyone making new investments in housing might be permitted to deduct up to twenty five per cent of his net income so invested when estimating his taxable income. He believes that this would constitute an enormous inducement to undertake new housing construction.[3] Many states have enacted special taxes on chain stores to protect the growth of small independent retailers. The rate of tax is made progressive as the number of stores in a chain increases. Some writers have gone so far as to suggest special taxes on idle plant capacity and excessive labor turnover.

The Relation of Taxation to Business Incentives.—A tax policy that stimulates business contributes towards increased prosperity. Many authorities believed that the American tax system at the end of the Second World War had in it elements that were repressive in effect. As a general rule, a tax policy is repressive in its effect upon business activity if it: (1) discriminates against risk or venture investments, and discourages new investment generally; (2) reduces consumption and thereby causes a contraction in sales, or (3) subjects business enterprisers to frequent changes

[3] Alvin H. Hansen, *State and Local Finance in the National Economy* (1944), p. 248.

in the form or rate of taxes (because future planning needs an environment of stability). We shall consider each of these three cases in turn.

Venture Capital.—A free capitalistic system must rely upon individual initiative to start new enterprises and maintain a dynamic, progressive economy. It is the lure of high profits that constitutes the incentive to assume the risks of new ventures. The role of venture capital can be very seriously impeded by an unfavorable tax system Progressive income and profits taxes satisfy our desire for justice and equity, but if the rates progress too rapidly and are confiscatory in the top brackets, industrial expansion can be retarded. Investors will compare the low returns obtainable from relatively safe investments with the net returns to be obtained from the successful assumption of risks after deducting the higher taxes that they must pay on the larger returns An extreme case of this discrimination against venture capital is seen in a comparison of business income after taxes with the yield of tax exempt securities "A private corporation bond yielding four per cent is no better than a tax exempt government security yielding two per cent for the man whose income tax reaches the fifty per cent bracket, and no better than a one per cent tax-exempt security for the man whose income tax reaches the seventy-five per cent bracket."[4]

Limitations of the right to deduct capital losses discourage new ventures. Under the Revenue Act of 1944, capital losses could be deducted in an amount not to exceed the amount of capital gains It followed that an investor in a successful new enterprise would face heavy taxes of various sorts, but if losses resulted he could not deduct such losses from his income unless it included capital gains in some other project A further discrimination against new enterprises of the venture type is implicit in the double taxation of corporate income referred to in Chapter XXV. The corporate income tax is paid on all corporate income, and the personal income tax must also be paid on that part of the earnings distributed as dividends. This supplies an incentive for stockholders to favor the reinvestment of earnings within a corporation rather than to receive dividends and invest the income in new enterprises. The large investor finds that withdrawal of earnings and reinvestment in new ventures necessitates acceptance of a large reduction in funds because of the personal income tax; he has a strong motive for opposing the distribution of dividends.

Any reduction in the taxation of business must either result in lower prices or increased income to the agents of production; hence, to that extent it may be considered stimulating to business activity There is clearly some validity in the principle that taxes on business repress business activity more than taxes on individuals

[4] Mabel Newcomer, *Taxation and Fiscal Policy* (1940), p 67

Consumption Curtailment.—The effect of taxation on consumption, and indirectly on sales volume, is difficult to trace. The proximate effect of a new retail sales tax will be a reduction in sales varying according to the elasticities of demand. However, since the tax money so collected will be spent by the government, the net result upon business activity will depend upon what type of expenditure the government makes. If government employees or pensioners received all the new revenue and spent it for exactly the same commodities and services that would have been purchased by the taxpayers if no such tax had been collected, then the net effect would be close to zero, except that a time lag between the period of collection and spending would intervene. At the opposite extreme, if the entire revenue were used to reduce the national debt, a sharp reduction in consumption would be the immediate effect, but the long-run consequences would depend upon who held the bonds that are retired, and how the holders utilized the money so repaid. All of this reasoning holds strictly true only when the price level is stable; the effects would be somewhat different during periods of inflation or deflation.

For other forms of taxation the repercussions on consumption are even more difficult to assess. For example, income taxes with low exemptions and high initial rates cut consumption more than do income taxes with high exemptions, low initial rates, and rapid progression, because the proportion of income that is saved increases as a person's income increases. Clearly, we must exercise great caution in generalizing upon the net effects of a specific tax upon the volume of consumer purchases. The only reasonably safe conclusion is that, the lower the income level reached by a tax, the greater its *immediate* effect upon the volume of consumer purchases.

Stability of Policy.—War and peace, prosperity and depression, each places its own strain upon the tax system, so that stability of tax policy becomes a goal very difficult of achievement. However, if business enterprise must face a never-ending succession of important changes in the type, provisions, and rates of taxes, uncertainty becomes a significant factor in business policy, and there is a deterioration of business morale. The initiation of a new enterprise and the management of its growth require planning long in advance. Any action that destroys confidence in the economic environment in which operations must be conducted can discourage expectations and reduce expansive activity. This is one reason for the old adage, "An old tax is a good tax." Such a tax is good in the sense that, if it has been long established, business has become adjusted to it.

Taxation and Full Employment.—Although frequent, ill-considered changes in the tax system are thus to be avoided, some writers would not construe this as a valid objection to systematic alterations of taxes to offset fluctuations in private business activity. They hold that if taxation is to be used as a means of compensatory control, then in periods of declining

employment taxes should be shifted to kinds that will encourage spending or investing, while in periods of full employment (or of growing inflationary pressures) the emphasis should be placed upon taxes that are repressive in effect. An increase in progressive tax rates tends to have the first effect, by causing taxpayers to turn over to the government (for its spending) funds that might otherwise be idle. It might be thought that the increase in rates would cause consumers to spend less, thereby depressing business, but if the emphasis is on high rates in the upper income levels, this effect will be negligible. This is because people consume relatively less as their incomes get larger, so that the higher rates would hit only those surplus incomes which would be largely unconsumed. The rates should not be raised on lower incomes, the bulk of which would be spent in consumption. To check an inflationary expansion, on the other hand, there should be an increase in taxes on consumption (sales taxes, excise taxes, customs duties), which, by reducing consumer purchases, may be expected to have repressive effects upon business. Taxes that add to business costs also tend to be repressive because, by increasing marginal costs, they raise market supply prices and so reduce effective demands. Taxes on business income or profits are less repressive, but they can discourage the introduction of new machinery and the building of new facilities.

However, broad generalizations of this sort lead one down a very treacherous path, because the forces set in motion are so complex that the net effects of tax changes cannot be certainly known. While increases in progressive taxes will absorb idle funds, it is also true, as noted above, that high tax rates may discourage new investment and, in the end, retard industrial growth. Reduction of the tax burdens on business tends to encourage new investment. The effects of a *general* tax reduction will depend upon how the taxpayers will use the new funds so released to them. We have already observed that the manner in which new government revenue is spent is also of major importance. Increased expenditures for relief or pensions would directly stimulate consumer expenditures, but the use of funds for a new TVA project would operate more slowly. In any case, some retardation of the effects would result from the time lag between the collection of taxes and their distribution by public expenditure.

When all these and similar difficulties are considered, along with the political impediments and pressures to which all tax legislation is subjected, the outlook for significant results in achieving full employment by manipulation of the tax system is not very good. This pessimistic conclusion should not preclude a careful study of the relation between taxation and industrial activity, for it is obvious that different tax combinations will give very different results. Wise tax planning could perhaps make some contribution towards a solution of the problem of maintaining full employment, but its possibilities are rather limited.

Compensatory Public Finance to Maintain Full Employment.—Earlier in this chapter we observed that the effect of public borrowing upon the level of prices depends upon whether the loans are made by a transfer of already existent funds or by the creation of new purchasing power. Transfer of idle bank balances or cash hoards will have an inflationary effect because the velocity of circulation of money is thereby increased, but usually transfer of purchasing power is made from current money income (not from hoards), so that no net addition to total purchasing power is involved. New purchasing power can be created either by the printing of paper money or by the expansion of bank deposits (checking accounts) Such creation of new purchasing power to finance government expenditures in excess of current tax revenues is called *deficit spending*.

Proponents of deficit spending argue that if this policy is followed at a time when labor and industrial facilities are unemployed, the idle resources will be drawn into production by the rise in total money incomes If the policy is properly controlled, they say, full employment will be established Inflation will result only if the policy is unwisely carried over into a period of full employment, when the increased flow of money income will create an upward pressure upon prices. It follows that when inflationary pressure develops, public expenditures should be exceeded by current tax revenues—that is, a process of debt retirement should be placed in operation. Acceptance of this philosophy would require that monetary controls and the control of public finance be fused; both would presumably be placed in the hands of a single authority Public finance would no longer be identified solely with the restricting of public expenditures, taxation, and borrowing to the minimum necessary for efficient operation of the government. The primary purpose of taxation would be to reduce the spendable money in the hands of the people The primary purpose of public borrowing would be to increase it. The traditional advocacy of a balanced budget would be abandoned. The integration of monetary and fiscal policy would be complete.

Much of the reasoning in support of deficit spending is based on the relation between saving, investment, and the flow of money income Money income in any given period equals consumptive expenditures plus investment expenditures Savings, if and when invested, add to the flow of money income However, saving and investment are not always linked together. Investment does not necessarily follow from money savings, for savings may be hoarded Conversely, it is possible for investment to take place without having been preceded by money savings if money is newly created for that purpose. Now if money savings are not invested, the flow of money income is reduced, and total spending will be insufficient to maintain prices at prevailing levels Deflation must result. Statistical research indicates that consumptive and investment expenditures tend to rise and

fall together during the course of a business cycle, but that they do not necessarily move at the same time or to the same degree. In the upswing of the cycle, investment expenditures increase prior to, and faster than, consumptive expenditures. In the downswing of the cycle the reverse tends to be true. The possibility of compensatory operations by government is thus made evident. When private spending falls off, let the government fill the gap by increasing its own expenditures, obtaining the funds for this purpose by deliberate monetary inflation. Reverse the policy, by deflating the currency, when private spending exerts inflationary pressure. Economic stability and full employment can thus be achieved.

Public relief, pension, and public works programs fit neatly into this fiscal policy, and its proponents have been very careful to give considerable study to these questions. Decline in private investment can be offset by building new schools, roads, public housing, and by other improvements. Decline in consumer purchases can be offset by increases in relief payments, veterans bonuses, and pensions. On the crest of the business cycle, all such government outlays would be reduced to the minimum that is consistent with the public welfare. Unfortunately, governments hitherto, (especially state and local governments) instead of timing their expenditures in accordance with this compensatory principle, have been inclined to start extensive public works at just the wrong time, concentrating them in periods of prosperity, because previously established taxes then yield the most revenue. The result is that in periods of prosperity governments compete with private business for the available resources, thereby adding to the inflationary pressure, when they ought to be doing just the opposite. Prosperity is a time when taxes should be raised, and used to reduce the public debt. The higher taxes will reduce inflationary spending, and the paying off of that part of the bonds that is held by the banks will deflate the volume of outstanding bank deposits.

The widespread fear of the rapidly mounting public debt that deficit spending tends to cause is discounted by the advocates of the compensatory policy as the unhappy by-product of orthodox economic thinking. If care is exercised in applying the compensatory principle, they maintain, the amount of public borrowing required for full employment will not be too great. Heavy reliance is placed on the so-called multiplier principle. As an example of this principle, money newly injected into the economy by public payments of wages will be spent by the workers for groceries, and by the grocers for clothing By thus passing through several transactions in a given income period, a little new money can be made to do a good deal of work. If we assume a multiplier of three, every new dollar will generate three dollars of additional money income because of secondary and tertiary spending. Deficit spenders believe that it is failure to act boldly and fast that causes the economy to drift to such a low volume

of industrial activity that staggering debt creation becomes inevitable. If we act vigorously, at once, when depression first begins, it will take only a little deficit spending to turn the trick. However, even if this reasoning is faulty, the deficit spender is still unconcerned, for he accepts in an extreme form the theory that an internal government debt is burdenless.

An Appraisal of Compensatory Finance.—There is no denying that economic instability is a serious fault of the contemporary world, and that the widespread fear of mass unemployment is well-founded. The suggested program of deficit spending is appealing because it appears to offer a simple way of escape from these evils Yet there are difficulties about it which limit its possibilities. It is too simple a remedy to effect a cure of so complex a disease. Our analysis of economic fluctuations and unemployment in earlier chapters showed that the causes lie in various defects of the economic process—in the institutions of money and banking, in distortions of the structure of industry, in price and wage rigidities, in the lack of centralized economic planning, perhaps in inequalities of income, and certainly in recurrent wars. Deficit spending cannot cure these underlying weaknesses. At best it can only deal with the symptoms by compensating them, somewhat like a counterirritant in medicine; and it involves a risk of its own making—the risk of a perpetually unbalanced budget, with an ever-rising public debt.

There are also operational difficulties in the program. Can experts forecast a year in advance what the magnitude of unemployment will be, and how much deficit spending or tax manipulation will be required to secure the necessary compensation? Just what is the correct multiplier to accept when estimating the effect of a given increase in expenditure; and is the multiplier a constant throughout the business cycle? Incorrect timing of action, or misjudgment of the amount of corrective action necessary, might be worse than no policy at all. Changes in the velocity of money must be considered. If velocity slows down as fast as new money is pumped into the economy, it may take years before the price level will respond and business activity be stimulated The reverse might be true in prosperity; once the expectation of rising prices is rooted in the public mind, the draining off of purchasing power by governmental activity may be negated by increasing velocity of circulation.

Compensatory financing places a heavy strain upon political sagacity Public borrowing is readily accepted in times of depression, but it is hard to induce taxpayers to approve a policy of higher taxes and rapid debt reduction in prosperity. When revenue is pouring into the public till and optimism is widespread, a policy of lower taxes is popular with the voter, and repressive action faces bitter opposition. The synchronizing of public works with the business cycle involves similar difficulties. Public improvements are popular when the Treasury shows a surplus and the investment

market easily absorbs new government bonds. State and local public improvements come to a sudden halt when depression brings falling revenue; the worried voters will not approve new taxes or bond issues to build high schools and the like. Even if the public in general is convinced of the desirability of the policy, every suggested change in taxation or borrowing brings out strong pressure for favored treatment by economic groups and political jurisdictions. Public housing raises the ire of private builders, loan associations, and the like; while each state and town fights for its share of the benefits to be obtained. These things make a constructive national program very difficult.

These political obstacles cannot be lightly brushed aside as "irrational," or as evidence of "immaturity" in public thinking. The motives to human behavior are not restricted to those of an economic kind; religious, moral, and political urges are equally important. A man may prefer the evils of the business cycle to his conception of a planned economy. A way of life may be more important to him than economic prosperity. Deeply seated biases must be recognized if public policy is to be successful.

These objections do not mean that the idea of compensatory fiscal policy is utterly without merit. They mean only that we should not expect too much from it. If we do not regard it as a *cure* for economic instability, we can at least include it as a *part* of the broader program suggested in the chapters dealing with unemployment and economic fluctuations. After all, it is true that budget policy may exert an important influence upon the monetary circulation; it can therefore be used in conjunction with other monetary controls to stabilize the money flow. It is also true that changes in the tax structure exert expansionary or deflationary influences on the economic process, regardless of whether they are intended to do so; therefore we may as well make use of this weapon as part of a broader program for dealing with instability. Having in mind, then, both the possibilities and the limitations of fiscal manipulation, the following concrete suggestions may be offered:

(1) The public must cease to look upon a balanced government budget as a fetish. If, over long periods, the budget is sufficiently close to a balance to prevent the public debt from rising faster than the national income, it may appropriately be unbalanced temporarily to combat depression. By deficit spending when expansion is needed and debt retirement when repressive action is called for, a contribution can be made to economic stability without incurring a long-run deficit. But freedom to incur debt when needed should never be permitted to degenerate into license. The idea that the debt can be indefinitely expanded without danger must be repudiated.

(2) Public expenditures should be designed so as to conform more closely to the demands of compensatory finance. This calls for wise long-range

planning of public works, social security taxes and benefits, and veterans pensions.

(3) All revisions of the tax system or changes in rate schedules should harmonize legitimate needs for revenue with the then present need for economic expansion or repression. Considerable research must be done before the potentialities of taxation as a device for economic control can be adequately utilized.

(4) A closer integration of federal, state, and local financing is necessary for the formulation of an over-all national fiscal policy

(5) These measures should not be relied upon exclusively The problems of economic stability and full employment require an approach far more comprehensive than the restricted area of fiscal policy.

Summary

Along with the trend for government to assume responsibility for maintaining economic stability and full employment, there goes a tendency to use public finance, and especially the national debt, as a means for controlling the general level of activity in the economy Government debts as a whole (especially the debt of our federal government) are rising markedly. These debts arise out of borrowing for (1) temporary financing to meet short-term requirements; (2) public works, such as schools and roads, (3) emergency financing, as in time of war; and (4) financing full employment to achieve economic stability Indebtedness may take the form of short-term bills, short-term notes, bonds, or paper money. These are sold or issued to the general public, insurance companies, savings banks, and commercial banks. Purchases by the first three groups merely transfer to the government purchasing power already in existence, and are not inflationary, but commercial bank purchases are usually financed by the creation of new demand deposits, which tend to inflate the money supply. The issuance of paper money is in effect a forced loan from (or a tax on) the public, and is usually inflationary.

The issuance of tax-exempt government securities permits financing at lower interest rates, but it offends the principle of equity and stimulates public extravagance Wars are usually financed largely by borrowed funds, but it is wise to finance them by taxes as far as possible. For such borrowing as cannot be avoided, the compulsory saving plan is preferable because (unlike the sale of bonds to the banks) it is noninflationary, and the later repayment of these savings helps to stave off a postwar depression. Borrowing does not postpone the physical burden of a war to the future, but it alters the incidence of this burden, and later it causes large transfers of income from taxpayers to bondholders. Since this is merely a redistribution of the national income, and not a subtraction from it, some economists

hold that the size of an internally held national debt does not matter. This overlooks the difficulties involved in taking money away from taxpayers to pay bondholders. Probably it is not wise to let the debt go much beyond twice the amount of the national income. Public debts can be discharged by repayment, repudiation, renewal, or a combination of two or all three of these methods. Some European government debts have no maturity date—their bonds are perpetual; but in this country the policy has been to reduce the debt from time to time.

All public expenditures, taxation, and borrowing have some effect upon the economy at large; therefore it is possible to accomplish a considerable amount of economic control by a planned fiscal policy Through changes in the kind of taxes, fiscal measures can stimulate or depress business, and by borrowing and spending, or by debt repayment, they can to some extent compensate for fluctuations in private consumption and investment. Borrowing for public expenditures (deficit spending) is being advocated especially as a device for maintaining the circuit flow of money so as to promote full employment. When full employment is once in effect, taxes should be raised and the debt reduced. While a compensatory policy of public finance may be a useful adjunct to other measures for dealing with economic fluctuations, it does not reach the underlying causes. It also requires accurate knowledge of future trends and of the precise amount of financial manipulation needed to get a given effect. Finally, it demands a great deal of political wisdom. For these reasons it should be used with caution.

REFERENCES AND SUGGESTIONS FOR FURTHER READING

Three excellent volumes by Harold M Groves contributed heavily to this chapter *Financing the Government* (1945), Chapters XXV to XXVIII inclusive, *Production, Jobs, and Taxes* (1944), and *Postwar Taxation and Economic Progress* (1946). A lucid analysis is found in Mabel Newcomer's stimulating little book, *Taxation and Fiscal Policy* (1940) For a vigorous defense of the philosophy of deficit spending and compensatory financing, see Abba P. Lerner, *The Economics of Control* (1944), especially Chapter 24, and two works of Alvin H Hansen *Fiscal Policy and the Business Cycle* (1941), and *State and Local Finance* (1944) For the opposing conservative viewpoint, see Harold G Moulton, *The New Philosophy of the Public Debt* (1943), and Hartley Lutz, *Guidepost to a Free Economy* (1945) Professor Hansen's second book above named presents, in Appendix A, a vigorous, interesting defense against Professor Moulton's attack Three short studies of the subject matter of this chapter are C O Hardy, "Fiscal Policy and National Income," in *The American Economic Review,* March, 1942, Albert L Meyers, "Government Borrowing and the Creation of National income," included as Chapter IV of his *Modern Economic Problems* (1939), and W A Morton, "Income and Employment," published as Chapter I of a symposium edited by T C T McCormick, and entitled *Problems of the Postwar World* (1945)

PART IX

COMPRÉHENSIVE PROGRAMS OF ECONOMY POLICY

CHAPTER XXVII

Economic Liberalism

A. The Theory and Program of Economic Liberalism

Comprehensive Programs Contrasted with Particular Measures of Reform.—Heretofore, in considering the problems which confront the industrial world, we have proceeded on the assumption that each problem could be met by particular measures designed to correct it, without changing the basic structure of the economic order itself. We have taken the broad outlines of the existing order, such as the institutions of private property, the price system, and individual freedom of enterprise, pretty much for granted. A program for the improvement of society, however, must not ignore the fundamental institutions and the broad plan of organization which underlies our economic system as a whole. It must be based upon some general principle or principles which are held to be most suitable as the foundation upon which to erect a social structure.

Several comprehensive plans of social organization have been proposed for such a foundation. These are *liberalism, anarchism, socialism, communism,* and *fascism.* Each presents a different scheme of social organization Liberalism is predicated upon a maximum degree of personal liberty. Hence it is also called individualism Anarchism is an extreme form of individualism which would do away with the state Socialism includes a number of plans which differ considerably in details, but which agree in upholding the collective ownership and control of industry. Communism goes beyond socialism, in that it would collectivize consumption, in addition to production. Fascism involves rigid control of economic activity by the state under very strictly regulated private ownership

The program of the anarchists is so visionary and violent that it is not taken seriously by most careful thinkers. We shall therefore discuss it only incidentally. Liberalism, socialism, communism, and fascism are the chief contending systems. Each has been so vigorously advocated that all have received a great deal of serious consideration. We shall analyze the four with some care in this chapter and the two which follow. Then, in a concluding chapter, we shall consider the possibility of general economic planning within the broad framework of capitalistic society.

Natural Rights and the Social Contact.—The earliest strong states or national organizations were autocratically governed. Power was in the

hands of militaristic monarchs or the nobility, while the masses of the people were held in subjection under conditions of slavery or serfdom. They were oppressed and exploited by the ruling classes, and although certain rights had in some cases been established by custom, they were usually rather insecure. Not infrequently, both the person and the property of an individual were subject to the whim of the authorities. Taxation was arbitrary and excessive. One could be thrown into prison on the slightest pretext. The condition of the common people was generally deplorable.

In its early aspects, liberalism was a reaction from this condition. As a philosophy it was developed by such thinkers as Locke and Rousseau, who denounced the oppression of the masses and defended the freedom of the individual. These writers argued that, prior to the development of a strong social organization, men had lived in a state of nature in which each one was free to do as he chose. In such a state he enjoyed certain rights, such as liberty and property. Having such an origin, these rights should be regarded as natural and just. The state of nature, however, was unsatisfactory because, in the absence of any superior authority or collective organization, each individual could defend his rights only by might, and his enjoyment of them could be interfered with by the aggression of another. The state of nature was chaotic and intolerable, and therefore men were supposed voluntarily to have entered into a social contract with each other, or with their sovereign, by which a state was organized. The contract was a tacit understanding rather than a formal agreement, but it was held to be nonetheless real. Men surrendered to the state such of their liberty as interfered with the equal liberty of others. The state then became charged with the duty of protecting each citizen in the enjoyment of his natural rights so long as they did not interfere with the equal enjoyment of others. Natural rights were relinquished in favor of civil rights maintained by the state, but the citizen did not give up any more of his natural liberty than was necessary to the maintenance of order and the protection of each from the aggression of others. In this way the social-contract theorists were able to argue that state encroachment on individual liberty was not justified, and that the fundamental rights of life, liberty, and property should not be infringed.

While this theory was of service in combating the oppressions of autocracy, and helpful in establishing democratic government, it was based on inadequate reasoning. There is no evidence that there ever was such a state of nature as the one pictured by these philosophers, nor that men had in the beginning any rights at all. There is no law of nature which decrees what rights human beings possess, nor is it conceivable that there are any rights which cannot be infringed if the interests of society demand it. We have already seen the truth of this criticism in our discussion of inheritance. The only sound standard for social policy is one that is based

on reason. An appeal to vague, allegedly "natural" principles is not convincing. Because of this, later philosophers gave up the doctrine of natural rights, but in doing so they did not give up the belief in personal liberty which had been defended by the social-contract theorists. Instead, they sought to find a new justification for it by proving it to be in the interests of the social welfare.

The Greatest Happiness Principle.—Jeremy Bentham, an English moral philosopher of the later eighteenth and early nineteenth centuries, found such a justification in the principle of "the greatest good to the greatest number." He held that social policy to be best which would bring the greatest happiness to the largest number of persons. All individual rights were to be exercised subject to this principle. Society might restrict the rights of some of its members, if by so doing it could contribute to the happiness of a greater number. Happiness, he said, consists positively in the presence of pleasure, and negatively in the absence of pain. Any act is good which increases pleasure or decreases pain, and the relative merits of any policy may be weighed quantitatively by comparing the relative amounts of pleasure and pain they entail. One person's pleasure he considered just as important as another's; no one was to be preferred. Hence he placed the emphasis upon equality and individualism. He then proceeded to defend the view that the greatest happiness of the greatest number can be promoted by permitting individual liberty. This argument was based very largely upon economic grounds; and it was further developed by the classical economists into a body of doctrines which constitute the essence of economic liberalism to this day. We must consider this reasoning in some detail.

Economic Liberalism.—The liberalism of Locke, Rousseau, Bentham, and their school was a broad philosophy applicable to all phases of social life. In its political aspect it was the basis of democracy, and it succeeded in overthrowing the autocratic governments then prevailing and setting up democratic governments in their place. The French Revolution and the American Revolution were both manifestations of its working. The American system of government, and especially the Bill of Rights contained in the amendments to our Constitution, are largely based upon its principles.

While economic liberalism developed out of this general philosophy, it was more specifically a revolt against the mercantilistic economic beliefs of the eighteenth century. Mercantilism upheld the principle that national wealth could best be promoted by state regulation of industry, and especially of international trade. It placed an exaggerated emphasis on money, and it advocated protective tariffs designed to establish a favorable balance of trade, together with detailed restrictions on every aspect of industrial life. Adam Smith, the founder of political economy, was greatly influenced by Bentham's philosophy. By applying his reasoning to these restrictive

measures, he was able to advocate a policy of governmental noninterference in industry which would permit freedom of enterprise and allow each individual to follow his own self interest in economic affairs. This emphasis on individual liberty in industry was further supported by Smith's successors, leading to the general philosophy of economic liberalism Since this philosophy emphasizes freedom of enterprise, competition, and the private ownership of property as the cornerstones on which the structure of economic life should be erected, *economic liberalism may be defined as that system of economic organization in which free enterprise, competition, and private property prevail*

Emphasis must be placed upon this definition because in recent years there has been some tendency to employ the word liberalism in a sense somewhat different from its original meaning. At the time when liberal doctrines were first pronounced, they represented a protest against the existing order; for the existing order then, as we have learned, was one in which very little liberty prevailed. Hence liberals were dissenters. This caused the term liberalism to be associated with any views in conflict with the *status quo* in society, and it is often used in this way today. We have a "liberal" movement in art which seeks to replace conventional forms by various abstract compositions and inscrutable designs. In religion the modernists, who combat the established fundamentalist doctrines, are also known as "liberals" By a strange inversion of terms the word has even come to be applied to reformers who seek increasing government regulation in industry to correct industrial evils—a use of the word which is the very antithesis of its original meaning Historically and etymologically, however, liberalism implies the principle of liberty or individual freedom. It is in this sense that we shall use the term.

Let us now see what is the reasoning by which the principle of economic liberalism is defended

Self-Interest.—Liberalists lay great stress upon the part played by self-interest in governing the behavior of men If an individual is free to do as he pleases, he will choose that course of action which promotes his interests best. In economic affairs this means that he will seek to do that which will bring the greatest income with the least expenditure This is simply the Benthamite principle of pleasure and pain in an economic form, income being the equivalent of pleasure, and outgo the equivalent of pain This implies the existence of a carefully calculating "economic man"—that mythical creature who has played so prominent a part in the classical system of economic doctrines Liberalism does not necessarily imply that everyone calculates his pleasures and pains to a nicety, however It merely asserts that each person knows his own interests better than anyone else, and that he is more likely to look after them At first thought, this emphasis upon self-interest may appear to put a premium on selfishness, which

may be expected to lead to antisocial conduct. Liberalists believe, however, that the welfare of all will be best promoted if each looks after his own interests, and they seek to show, by a line of reasoning presently to be set forth, that there is no essential conflict between the interests of the individual and those of his fellows.

Competition.—Liberalism places great reliance upon competition as the stimulus to efficiency and the protection of each individual against exploitation by others. Where there is free enterprise and freedom of contract, each one will seek to enter into the arrangements which are most profitable for him. This leads to competition among individuals to secure the best advantages. There will be competition among consumers seeking to buy, and among producers seeking to sell. The influence of the first is to raise prices, and of the second to lower them. The resulting equilibrium price system is one that is fair to both producers and consumers. In fact, the whole price system of modern society is regarded by the liberalists as a demonstration of the effectiveness of their principles. They reason, as we did in Chapter XIX, that this system makes for economy. Competition sets high prices upon those goods which are most in demand, and low prices upon those which are least in demand. Production is thereby directed into the most important channels.[1] This economy permeates the whole industrial process, leading enterprisers to enter those industries which offer the greatest prospect of profits, inducing capitalists to invest their savings where the demand for them is greatest, and guiding land and labor to their most productive uses.

We may think of competition as a cruel and unethical struggle, but the liberalist looks at it as an effective process for the promotion of economy and efficiency. We cannot escape from it in any case, for competition is an inevitable result of scarcity. So long as the means of production are scarce, all wants cannot be satisfied, and the desire of each individual to gratify his own desires to the utmost brings him into inevitable conflict with his fellows. Professor T. N. Carver, a staunch liberalist of the early twentieth century, said that the question is not whether we shall have competition or no competition, but what kind of competition. If we have collectivism (which he regarded as the alternative to liberalism), competition will be political, for economic questions will be decided by a democratically governed state instead of by prices. The state authorities must follow the vote of the people, but prices follow consumers' price offers. People spend their incomes more wisely than they vote, he believed. Therefore, prices

[1] If we observe that production is for those who can pay the most, rather than for those who have the greatest needs, the liberalist replies that the wants of the former are most important, or their incomes would not be larger, for distribution is in accordance with productivity. This argument, however, is untenable in view of our reasoning concerning inequality. It is especially vitiated by the presence of unearned incomes. Hence our criticism of liberalism on this point below.

are likely to prove superior to ballots as a guide for production. He also contended that competitive industry is more democratic than any government. It gives a more open road to talent, for the businessman with vision needs only to command a small following of intelligent buyers to succeed with his project, whereas the political leader must convince the unintelligent majority. It is also more sensitive to popular will, because the consumer can spend as he chooses and can withhold his patronage from a businessman if he does not like his wares; but he must accept the services of government and pay taxes for their support, whether he likes them or not. Finally, Carver alleged that economic competition is not as wasteful as political, for the terrific cost of campaigning is more excessive than the failures and inefficiency of private business.

Liberalists further claim that competition leads to a process of natural selection, by which each individual will find his level in that position which he is best able to fill. Those who are capable of leadership and executive organization will become successful enterprisers, where they will be in the best position to exercise these qualities. The inefficient businessmen will be weeded out by the simple process of failure. Those who are best fitted for employment under the direction of somebody else will naturally become wage-earners. Employers will compete with each other to secure the most efficient workers, so that each laborer will find that place in industry where he can contribute service of the greatest value. The relative wages paid in different employments will induce each to do the highest type of work of which he is capable.

The Defense of Income Division in a Competitive Economy.—According to liberalism, the system of income sharing (distribution) which results from the competitive pricing process is a just one. It pays each according to his productive importance or worth. This is interpreted to mean that each is rewarded in proportion to the social service he renders. This is alleged to be the best principle of sharing the social income, because it is the most economical. We learned something of the economy of this process in Chapters XXI and XXII According to the analysis there presented, those agents of production are paid most which are most scarce in proportion to the demand for them. This setting of high prices upon those agents which are most scarce we found to have three important effects: (1) It stimulates the growth of those agents which are most needed in industry. High interest rates encourage saving and investment. High wages encourage young men to undergo training for skilled occupations. High rents stimulate the conversion of land from less productive to more productive uses. (2) It stimulates the employer to use the agents of production with a minimum of waste. That means not only that he will exercise careful oversight in their management, but that he will never use an expensive agent to do work which might be performed by a less expensive one. (3) The prospect of

profits encourages the enterpriser to efficiency. On these grounds the liberalist justifies much of the inequality of incomes which now prevails in society We shall learn presently, however, that some liberalists find it consistent with their principles to suggest measures which would lead to a reduction of inequality.

The Harmony of Individual and Social Interests.—Since the effects of competition and the price system are so beneficent, liberalists conclude that the alleged conflict between the interests of the individual and those of society is more apparent than real. Adam Smith said that each person, in following his self-interest, is led "as if by an invisible hand" to promote the interests of society also. Selfishness in economic matters is believed to accord with altruism. The self-seeking individual tries to maximize his gains. His greatest profit is to be found by producing that which is most demanded. So his need is reconciled with that of his customers. His profit is but the just price of the service he renders to them. The whole system of division of labor and exchange is a cooperative undertaking, in which each is producing for all and all for each.

A French school of liberalists, led by Frederic Bastiat, carried this belief in the harmony of individual and social interests to absurd lengths. Bastiat sought to rid economics of every doctrine which revealed any element of discord or pessimism. He attacked the law of population because it threatened a fall in wages, and the law of rent because it threatened to increase the unearned incomes of landowners. He built up an entirely new system designed to show the harmony of interests in society. Like most persons who seek to reach conclusions that agree with a preconceived bias, his results are lacking in scientific merit and have been generally discredited. His school, sometimes called the Optimists, no longer has a following, and his doctrines are not relied upon by modern liberalists as the basis for their philosophy.

The Defense of Private Property.—The institution of private property is regarded as part of the system of liberalism, for liberty is construed as implying freedom to acquire property by production, occupation, or exchange, and to dispose of it as one likes—as long as it is not wrested by force from someone else. Carver said, "property exists automatically and necessarily in any group where the individual is safeguarded against violence. If he is safeguarded against violence, he may hold anything in his possession until he sees fit to give it up of his own free will. If anyone who tries to dispossess him by violence is promptly repressed by the group, that very act on the part of the group safeguards him in his possession—it transforms his possession into property."[1] Some have held that liberty involves the right to property because property is necessary to the maintenance of personal independence. But this would require that everyone should own

[1] T N Carver, *Principles of National Economy* (1921), p 104

some wealth—a condition that is not realized under a system of liberty and free enterprise It would lead to a criticism of the institution of property as it now exists. Liberalists, however, usually defend property pretty much in its present form.

Early liberal teachings regarded the private ownership of wealth as one of the natural rights which were assumed to be original and inviolable, but with the abandonment of the natural rights doctrine a justification of private property on other grounds was sought. Some argued that every man was entitled to the product of his own labor, and that this was the basis for the right of property. But not all property can be established in this way, for much of it is not due to the labor of its owners; some of it is not the product of labor at all. The chief defense now relied upon is based on considerations of social utility. The private ownership of wealth is said to lead to its most effective utilization. The superiority of farming when carried on by proprietors over that which is carried on by farm tenants is cited in proof of the contention that property owners are the ones most likely to administer wealth with care and economy. That which is common property is too often regarded as no one's property, and is treated with neglect or abuse.

Laissez-Faire.—Believing that the force of self-interest promotes the most efficient and equitable economic system, the liberalists oppose any great measure of intervention in economic matters by the state. The more the state regulates industry, the more it encroaches upon the liberty of the individual and obstructs the economy of natural economic laws Liberalism, therefore, advocates the policy of nonintervention, or *laissez-faire* Business is to be let alone as far as possible State participation in industry is obnoxious, for it can only interfere with the beneficent operation of spontaneous economic forces Nor should the government undertake to operate industries of its own Government ownership is taboo, for government industry is inefficient and wasteful.

Liberalists recognize that some state organization is necessary, but they believe its functions should be kept to a minimum. Where industry is concerned, the state should play the part of a referee, rather than that of a participant. It is like a baseball game in which certain rules have been laid down as necessary for the maintenance of fair play The umpire is charged with the task of seeing that these rules are enforced, but the actual playing is left entirely to the members of the teams So in industry, it is the role of the state to see to it that free and fair competition is maintained, but to interfere as little as possible in the actual conduct of business The state should enforce the fulfillment of contracts once made, prevent actual dishonesty, break down monopolies, and the like, but it should not fix prices, prescribe the details of product or policies, nor operate industries of its own.

Some liberalists have attempted to outline the functions which the state

may properly exercise without encroaching on individual liberty, as follows: It should provide armies and navies for the national defense. It should establish courts, a police force, and other machinery for the settlement of disputes, the enforcement of contracts, and the punishment of crime. It may also undertake to provide certain public facilities which could not be furnished at a profit by private individuals, but which are nevertheless important for the social welfare. Among such activities are the maintenance of public parks, schools, and roads. Where monopolies exist, inasmuch as they offend the principle of free enterprise, the state's duty is to break them up. But beyond such bounds as these it is unwise for it to go.

It has already been stated that some writers who profess to be liberals interpret the legitimate functions of the state as much broader than these, but it may be doubted whether their views can properly be designated as liberalism.

Liberalism and Capitalism.—In noneconomic affairs the principles of liberalism have been widely accepted throughout most of the occidental world. Personal liberty, such as protection from arbitrary imprisonment, security of property, freedom of contract, the right of assemblage, free speech, freedom of the press, toleration of various forms of religious worship, and the like, are now formally recognized and reasonably well maintained by all enlightened governments.[3] Their exercise is subject to certain considerations of public welfare, and they are likely to be somewhat curtailed in time of war, but they are not seriously interfered with in times of peace. In this country they are fundamental guarantees written into the constitutions of the federal government and most of the states. Along with them has gone the idea of universal suffrage and democratic government. Equality of the sexes in most matters has now been achieved. In many respects, therefore, the present social order is one of individualism, where liberty reigns supreme.

In economic matters also, liberalism has had great influence. In the early stages of capitalism its triumph was almost complete. During the later eighteenth and early nineteenth centuries, the teachings of Adam Smith and the classical economists succeeded in breaking down the restrictions by which government, under the doctrine of mercantilism, had hampered industry, and a regime of *laissez faire* became established. However, the promised harmony of individual and social interests failed to materialize. Intolerable exploitation of labor developed in the factories. Scandalous mismanagement appeared in financial institutions. Unscrupulous promoters and corporate executives enriched themselves at the expense of stockholders. Monopolistic combinations were organized which throttled trade in their respective industries. Serious business depressions occurred with distressing

[3] In countries dominated by fascism and in U.S.S.R. under the present communist regime, the principles of civil liberty are rejected. See the next chapter.

frequency. In an effort to cope with these problems, the people turned to the state for relief, and government responded with a long succession of regulatory measures, which have continued to multiply up to the present time. The preceding chapters of this book have been filled with a description of these, and with proposals for many more. So, our system has been gradually moving away from liberalism, although many liberal institutions survive in a more or less altered form.

The result is that today we are living in a regime which represents a mixture of liberalism and state regulation. Perhaps it can best be designated as *regulated capitalism*. It does embody considerable economic freedom in some directions. The consumer is free to spend his income as he pleases, patronizing those dealers whom he prefers, and accepting or rejecting, at his pleasure, the various wares that are offered to him in the market place. But his freedom is often limited by the presence of monopolies which control the supply of some commodities. In those cases he must buy from the monopolist, or go without. The individual has substantial freedom in respect to his livelihood. He chooses his own occupation, and he is free to accept or quit his employment. But in many cases his trade may be dominated by a union into whose membership he may have to be accepted before he can be employed, and whose regulations he must obey if he is to hold his job. A person may save as little or as much of his income as he likes, and invest it where he pleases; but the terms of the investment are subject to the scrutiny of the Securities and Exchange Commission. A man may set himself up in business if he desires (so long as he does not try to break into a field that is dominated by a monopoly) and, within reasonable safeguards to protect the public interest, he is free to enter into such contracts with other businessmen as he finds to his advantage. But he may be restrained by minimum wage laws or labor unions from fixing such wages as a free market might establish, and the hours and conditions of work in his establishment may be regulated by the union or the state. If he tries to borrow money from his bank, he will find that the law limits the amount of interest that the bank may charge, and regulates the operations of the bank (to his advantage or disadvantage) in many ways. If he sets out to manufacture foods or drugs, he will find inspectors from the Food and Drug Administration looking into his doings, prescribing the labels and fixing the minimum quality of his products. If he is in a public utility industry, a commission will tell him how much he can charge for his products. He may own property, but he cannot do with it as he pleases. The state may say that he has too much, and levy a heavy tax upon it for the deliberate purpose of reducing it. If he owns a farm, the Department of Agriculture may tell him he cannot grow more than certain quotas of certain crops upon it. He may own an automobile, but he cannot operate it as a taxicab without the permission of a public service commis-

sion. And there is much state ownership of property and state enterprise, such as the Tennessee Valley Authority in this country and the government railroads of Canada and Mexico.

So, it is apparent that in regulated capitalism, free enterprise is limited by regulation, competition is restricted by both labor and industrial monopolies, and state control over private property limits the rights of ownership. It is therefore a misnomer to describe the present system (as some writers are doing) as "The American system of free enterprise." It is a mixed or hybrid system, somewhere between liberalism and collectivism. And, as regulation is piled on top of regulation, it is getting further away from liberalism all the time. To put a liberal program into effect in the United States today, we would have to undo much of the legislation of the past century or more. Such organizations as the Federal Reserve Board, the Interstate Commerce Commission, the public utilities commissions of our various states, the Agricultural Adjustment Administration, the Tennessee Valley Authority, and the Social Security Board would have to be abolished, along with many other activities of government. All our protective tariffs would have to be repealed, to be replaced by complete freedom of international trade. All existing monopolies would have to be broken up, to be replaced by smaller competing units. Labor unions would have to be dissolved. We shall see also, as we go on, that some liberalists advocate changes even more sweeping than these as essential to the maintenance of liberalism.

Liberalism and Anarchism.—In some respects, liberalism resembles the doctrines of the anarchists. Anarchism is individualism carried to its logical extreme. Anarchists believe that human beings are essentially intelligent and socially minded. They believe that if free to follow their own impulses, without coercion from government, they would naturally coöperate, and many of the evils now found in society would disappear. The two systems are alike, therefore, in exalting the individual and in advocating the reduction of governmental functions to a minimum. They differ, however, in that anarchism would abolish *all* government, whereas liberalism would retain much of it. Anarchists do not believe in binding contracts nor in coercive authority of any kind. Liberalists believe that coercion is essential to the fufillment of contracts and the maintenance of peace and honesty. Anarchists would also abolish the institution of private property, while liberalists would retain it. Anarchists believe in violent revolution, while liberalists do not. Liberalism is essentially reactionary, in that it would go back to institutions that prevailed in the past. Anarchism is radical in that it would overthrow existing institutions, to replace them with an entirely new system. In spite of the similarity of some of their doctrines, therefore, the two systems are very different.

B. A Criticism of Liberalism

The Merits of Liberalism.—An impartial critic must recognize that there is a great deal of merit to much of the liberalists' reasoning It cannot be denied that the self-interest of people is a powerful motive to achievement, and that under the spur of individual initiative tremendous progress in production has been made. The same is true of competition. Enough has been said in other chapters to give force to the argument for free markets and the price system The institution of private property, too, responds to a deeply seated desire of human nature, and promotes the accumulation and care of wealth. When one considers the alternatives to these things, one may hesitate to discard them.

Yet they constitute a good not wholly unmixed with evil Capitalism has not adopted them in their entirety, because circumstances have revealed the necessity for their modification Still further modification may be neces sary before we can give them our approval A critical analysis of the features of liberalism reveals weaknesses which are not at first apparent.

The Inadequacy of Self-Interest.—One weakness is the reliance which it places upon self interest It assumes that if individuals are let alone, their self interest will lead them to do the thing which conduces both to their own welfare and to that of society Our discussion of consumption in Chapter XVIII, however, would indicate that we should not place too much confidence in the ability of individuals to look after their own interests as consumers. People are often ignorant or unwise in the expenditure of their incomes. They adopt unintelligent habits, such as the use of narcotics This may make it wise to protect them by some form of prohibition. They may be misled by untruthful or otherwise undesirable advertising This indicates the need for control to correct this difficulty. Lack of standardiza tion of consumers' goods may make it impossible for a consumer to know just what is the quality of the merchandise he is purchasing. The state may properly take measures to secure such standardization. The tendency to adulterate food and to manufacture shoddy merchandise makes it the duty of government to protect the consumer from these abuses.

There is also reason to believe that we cannot rely wholly upon the individual to protect his own interests as a producer. The many failures which occur in business, all of which involve waste of productive power, are sufficient to prove that not all businessmen can pursue their self-interest intelligently. The truth is, modern industry is so complex and uncertain that the individual enterpriser has not enough information about the state of the market and its future prospects to guide his policies satisfactorily Frequent overproduction in this or that industry results, while periodically there is the general breakdown of crises and depressions. These serious maladjustments point to a need for greater coordination and central plan-

ning in industry, and this is not consistent with a system of completely free enterprise that permits each firm to decide for itself what things it shall produce and what quantities. Some writers believe that eventually we must have some sort of state machinery for the central planning and direction of industry as a whole.

Again, we cannot depend upon self-interest to protect the welfare of the wage-earning classes. Laborers are often too ignorant to know how their well-being can best be promoted, or they are at such a disadvantage in bargaining that they cannot protect themselves from exploitation. We have seen how the underpayment of sweat-shop employees may justify the enactment of minimum wage laws. We have seen how the state has found it necessary to protect women and children employed in industry. Laborers themselves have met their problems by union organizations, and in this country the federal government compels employers to bargain with these unions. Collective bargaining is essentially a departure from the principle of individualism. These unions should be supported, but regulated.

These considerations suggest that individual action must be supplemented by collective action if true social welfare is to be promoted. The principle of self-interest is valuable, but it cannot be relied upon exclusively.

The Inadequacy of Competition.—Liberalism is based upon a belief that freedom of contract and the force of competition will assure to each individual his just due. His reward will be commensurate with his service, and consumers will be protected from extortion. Unfortunately, these arguments have been effectively disproved by the facts of history. We have already seen how, in the early days of the Industrial Revolution, a *laissez-faire* policy was adopted in England. Intolerable industrial conditions developed under this policy. The terrible conditions which prevailed convinced legislators of the necessity for intervention, and it was for this reason that labor legislation, which interfered with the laborer's "freedom of contract," was resorted to. Under free competition, also, business practices of a very questionable sort prevailed. This has been abundantly illustrated by the history of American finance in the past generation. The development of corporations in this country has been attended by all kinds of chicanery and fraud, and many of the millionaires of a generation or two ago amassed their fortunes by competition of the most brutal and unfair sort, not infrequently accompanied by downright dishonesty. Competition, when unrestricted by regulatory laws, does not protect the consumer from deception or extortion, the investor from swindling, nor the high-minded businessman from the unfair methods of his unscrupulous rivals. These things can be attained only by collective control.

One might suppose that such collective control need not be contrary to the principles of liberalism, for liberalists themselves suggest government interference as necessary to maintain free and fair competition Under

modern conditions, however, the measures necessary to achieve these ends involve such extensive regulating bodies that they are hardly compatible with the principles of liberalism. It becomes necessary to dictate what kind of accounts businessmen shall keep, what prices public utilities shall charge for their services, and many other details. It is even probable that competition itself will have to be reduced in some respects, giving way to regulated combination, in order that the various parts of the economy can be coordintaed into a nicely adjusted, balanced whole.

There are three reasons why competition fails to regulate business satisfactorily. In the first place, unscrupulous businessmen lack the ethical standards essential to fair competition. So competition, instead of being a dignified effort to secure business by offering superior products and effecting greater economies in production, too often becomes a ruthless struggle to suppress one's rivals by vicious means.

In the second place, free competition is not necessarily equal competition. In the chapters on inequality we discovered that many people are given a better start in life than their fellows, by inheriting wealth or enjoying the influence of powerful relatives or friends. Obviously, he who has capital to begin with is in a better position than he who has not. At the other extreme are persons inadequately equipped for the industrial struggle by lack of education or pecuniary means. Their ignorance and weakness put them in a position where they can be exploited by their more fortunate fellows. In other words, competition bestows its prizes upon the strong and lucky at the expense of the weak and unlucky. This destroys the connection between reward and service which is assumed to exist by the liberalists.

Thirdly, competition is so distasteful to the competitors that, sooner or later, they seek to escape it by establishing a monopoly. Liberalism would break up such monopolies, enforcing the maintenance of competition in industry. The discussion of integration in Chapter III, however, and of the problem of monopoly, raises grave doubts as to the advisability of this solution. Competition involves waste in the duplication of plant and lack of coordination between the various processes of production. Combination eliminates useless plants and integrates the successive stages in the productive process so as to stabilize markets and to assist in the continuous utilization of all the labor and capital available Such being the case, the program calculated to secure the greatest efficiency in industry is in some cases one of regulated monopoly rather than of enforced competition. This is incompatible with the system of liberalism.

We have seen that liberalists defend competition as a means of natural selection which brings the efficient leaders to the top in industry. This may be questioned. We have already noted that free competition is not equal competition. Only if competition were equal could we be sure that

the fittest would be the ones to succeed. Even then we would have to ask, "Fittest for what?" Industry judges of fitness by money-making power. Profits is the criterion of success. Can we measure the social service of an individual by his ability to make money? Some of the most gifted persons, such as the artistic genius or the inventor, receive the poorest rewards. The painter lives in his attic, and his work is not recognized until after his death. The inventor may live in poverty, while some capitalist enterpriser reaps a fortune from the marketing of his contrivance. We have seen that profits are often made in evil ways. They may represent the exploitation of employees or of consumers. In view of these things, it is by no means certain that competition selects those who are really fittest to contribute to social welfare.

Some Defects in the Price System.—Liberalism relies upon prices as the guide to production. In Part VI of this book we learned that, while the price system can be made to work satisfactorily, this cannot be done without some intervention. Until consumers are more intelligent and more adequately protected from deception and shoddy merchandise than they are now, their choices, as expressed in their expenditures, will not indicate the real utility of commodities. A greater difficulty is the fact, several times previously stressed in this volume, that consumers do not have equal purchasing power. Liberalism would perpetuate extreme inequality of incomes. This means that the demands of the rich for merchandise of trifling importance will exercise more control on production, through prices, than important wants of the poor. The price system will never be a satisfactory guide for production until greater equality in incomes prevails. Our analysis of this problem indicates that its solution requires increasing measures of intervention. Finally, the successful operation of the price system requires great mobility among the agents of production. A change in the demands of consumers will not bring about corresponding changes in production, unless labor and capital are free to move from one employment to another. The presence of fixed, specialized capital in industry, and the well-known immobility of labor, interfere with this flexibility. As a result, serious maladjustments between supply and demand occur. It is true that these will correct themselves *in time* through the operation of the price system, but not without much loss and suffering. Intervention, in the form of more intelligent control of production, might prevent many of these maladjustments, or hasten their correction when they occur.

The Inadequacy of Income Division under Liberalism.—Liberalism defends the present system of division of social income in its essentials. But in the three chapters on inequality we have found much to criticize in this system. We will not repeat the criticism here; it is enough to recall that the great inequality which results under the present regime was found to be undesirable, particularly in view of the fact that many incomes are not

earned. This means that payment is received without the rendering of a corresponding service to the community. So long as this is the case, the harmony of individual and social interests, alleged to prevail under liberalism, is a myth. Our program for the correction of inequality calls for considerable intervention, which is not compatible with the principles of liberalism.

A Criticism of Private Property.—The liberalists' defense of private property cannot be accepted without qualification. When private property could no longer be justified as a natural right, or as the product of the labor of its possessor, its position became very vulnerable. If its validity rests upon its social usefulness, the right can be restricted, and ought to be, in every case where no social welfare is promoted by it. We have seen that there are many cases where wealth is acquired without the rendering of service. These cases can doubtless be corrected without abolishing the institution of private property itself, but we have found other cases where the public interest demands ownership by the state for the sake of unified operation of important industries, for the conservation of resources, or for other considerations of social welfare. The desirability of some private ownership as a general principle is not denied, but it cannot be regarded as an inviolable right.

Modified Liberalism.—Modern liberals recognize some or all of these defects, but they believe they can be corrected without departing from the really essential principles of liberalism The essential thing, as they see it, is to preserve the substance, rather than the appearance, of liberty They do not object to measures of governmental control which, while apparently interfering with free enterprise, really promote liberty. They believe that many of the defects of *laissez faire* arise out of the fact that liberty is in fact restrained, and equal competition prevented, by institutions which prevail under that policy Changing these institutions, therefore, would not be a departure from liberalism

For instance, Professor Carver offers "A liberalist program for the complete abolition of poverty" which includes the taxation of land values and inheritance, the control of monopoly prices, the curtailment of immigration, the restriction of marriage, the enactment of minimum wage laws, and other legislative measures.[4] He believes that all of these are not only not inconsistent with, but are really essential to, the maintenance of liberalism Inheritance and the private appropriation of land values he regards as institutions which interfere with equal competition, and equal competition is the very essence of liberalism, as he interprets it. Monopoly is in the same position Immigration and unrestricted marriage cause low wages. Their restriction, he thinks, will raise wages without governmental inter-

[4] T N Carver *Principles of Political Economy* (1919), pp 583 584 See also his *Essays in Social Justice* (1915) Chapter XIV

ference in prices, and without destroying the economic liberty of the individual. Minimum wage laws are defended as correcting the handicaps to equal competition which result from the ignorance and weakness of certain laboring classes. Mr. L. T. Hobhouse, an English liberalist, supports an even more sweeping program.

While such measures as these may preserve the spirit of liberalism, they have departed considerably from its form. There is perhaps a sense in which the liberty of the individual may be enlarged by governmental interference with the ownership of land, the inheritance of wealth, the practices of monopolies, and so on; but it is accomplished by a considerable extension of governmental functions, and by greatly restricting some of the liberties now enjoyed by certain members of society. This is quite a departure from liberalism as it was originally understood. Mr. Hobhouse admits that his proposals "embody many of the ideas that go to make up the framework of socialist teaching." He interprets liberalism as constituting a middle ground which "seeks to do justice to the social and individual factors in industry alike, as opposed to an abstract socialism which emphasizes the one side, and an abstract individualism which leans its whole weight on the other. By keeping to the conception of harmony as our clue, we constantly define the rights of the individual in terms of the common good, and think of the common good in terms of the welfare of all the individuals who constitute a society."[5] He even intimates that perhaps it would be more appropriate to call this philosophy "Liberal Socialism."[6]

Liberalism and the Modern State.—At the beginning, liberalism was a reaction against the excesses of an autocratic and unintelligent government. Its objections to state activity apply with less force to the modern occidental world. As governments become more democratic, we have less to fear from the arbitrary exercise of power by the public authorities. In the long run, they must administer their offices in ways not too displeasing to the voters who elect them. We have made less progress toward improving the intelligence of government, perhaps, but it is not unreasonable to assume that, as future years bring into office administrators and legislators with more vision and understanding of economic matters, we may grant them greater powers of economic control without misgiving. Tinkering with business by people who do not understand it is dangerous. If this is the alternative, economic affairs had better be left to themselves. But as we grow more familiar with economic laws, we can begin to mold existing institutions as we want them, with every hope of success.

The Passing of Pure Economic Liberalism.—The tendency of modern liberalists to modify the pure doctrine of liberalism is an evidence of the weakness of the liberal program. Once embarked upon such measures of

[5] L. T. Hobhouse, *Liberalism*, (London, 1911) p. 211.

[6] *Ibid.*, p. 172.

intervention as those outlined in the preceding paragraphs, the line between liberalism and other programs of social policy is hard to draw. Pure individualism is too defective to command our approval. Modified liberalism is a compromise which can hardly be called liberalism at all. Such a compromise may be desirable. Before we decide upon it, however, we should consider the programs of socialism, communism, and fascism, which are the principal alternative proposals. This we shall do in the following chapters.

Summary

Liberalism is a comprehensive program of social policy which may be contrasted with anarchism and collectivism. It stresses the liberty of the individual. Originally based on the natural rights philosophy of such men as Locke and Rousseau, it later came to be defended on Bentham's principle of the greatest good to the greatest number.

Economic liberalism was a reaction from the mercantilist system. It is that system of economic organization in which free enterprise, competition, and private property prevail. Economic liberalism argues that there is a harmony of individual and social interests where free enterprise exists because: (1) The self-interest of people leads them to look after their own welfare if left free to do so, and they can promote their interests best by efficient production of goods for others. (2) Economic competition establishes economy through the price system; it is more satisfactory than political competition, and it naturally selects the most efficient leaders for industry. (3) The competitive system of distribution is good because it rewards each in accordance with his productive importance and promotes economy in the use of the means of production. Private property is also defended, on the ground that it secures the best utilization of wealth. The maintenance of liberty requires a *laissez-faire* policy of government, whose activities should be restricted to a minimum.

In its early stages, capitalism embodied the principles of liberalism, but the present system of regulated capitalism is characterized by much more state regulation and monopoly than would prevail under liberalism. Anarchism resembles liberalism in its emphasis on individual liberty, but is much more radical in seeking to abolish all government and private property.

The principles of liberalism have many merits, but they are defective in several respects. The ignorance of consumers and producers makes it undesirable to rely entirely on self-interest to guide individuals in economic affairs. Free competition works badly because of unethical competitive practices, the unequal opportunities which different people enjoy, and the growth of monopoly. It does not always give success to those who contribute most to social welfare. The satisfactory operation of the price system